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Higher Education Center: The Potential for Sharing Facilities among Institutions of Higher Education in Connecticut.

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This report examines the potential for sharing facilities among the institutions of higher education in Connecticut and evaluates the application of the shared facilities concept to a proposed Higher Education Center in the Central Naugatuck Valley Region (CNVR). The history of the Center proposal is outlined and the concept of sharing higher education facilities is discussed in terms of its implications for students, faculty, the participating institution, the academic program, facilities, administration, and funding. Some consideration is given to the effect of coordination on colleges and universities across the state, but most attention is focused on developing the idea of the Center and exploring its possibilities for the CNVR. Recommendations based on the findings of this study are made for establishing the Center in Waterbury, Connecticut. (JS)

HIGHER EDUCATION CENTER
The potential for sharing facilities among institutions of higher education in co...

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HE 000 450

June 1968

Higher Education Waterbury Connecticut

This report is submitted to the Central Naugatuck Valley Region Education Center–Organizing Body established by the Commission for Higher Education, State of Connecticut. The Commission funded* the study for the Organizing Body to:

- Identify and develop the potential for sharing facilities among institutions of higher education.
- Evaluate the application of the shared facilities concept to the proposed Higher Education Center in the Central Naugatuck Valley Region (CNVR).
- Develop the application of the shared facilities concept to the proposed Higher Education Center in the Central Naugatuck Valley Region (CNVR).
- Test the concept and the concept application in Connecticut against the experience of consultants qualified in facilities for, and/or consortia among, institutions of higher education.

The study is based on previously documented information and the contributions of the Commission for Higher Education, the governing boards of the component systems of higher education and representatives of the collegiate institutions in Waterbury. It should be noted that this information cites current projections at a time when higher education in Connecticut is in a state of rapid growth and change.

The report is subdivided into five sections. Complete understanding requires that the report be read in the sequence presented. Following the Background section, the concept of shared facilities is explored. The application of the concept is developed in the next two sections, first to the state generally and second to the CNVR specifically. Concise summaries of the precepts for development, recommendations and implementation are included on pages 16, 24, 40 and 42. The final section is the Appendix.

*In addition to Commission funds, this report has been made possible through support by Educational Facilities Laboratories, Inc., and through a contract with the Commission on Aid to Higher Education under the Higher Education Facilities Act of 1963.

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background

History
CNVR Education Center
Proposal

In 1965, the General Assembly established the Commission for Higher Education (CHE). The intended purpose was to set a framework for the coordinated development of higher education. The Commission is ". . .responsible for coordination of planning for higher education throughout the state . . ." The Commission is also required to ". . .prepare for the governor and the general assembly a report of the budget requests of the constituent units and the proposals of the commission for an improved coordinated program of higher education in the state".

The Commission, in exercising its responsibilities, is confronted with an increasing demand for public higher education. In 1976, there will be 91,700 persons aged 18 to 21 qualified for higher education compared to 57,600 in 1962, according to the Connecticut Development Commission. Some education beyond high school is fast becoming a universal desire and, to an extent, a basic requirement in an increasingly complex society. This is particularly true in Connecticut. "The necessity for an education will become of prime significance as further advances in technology progressively outmode the unskilled and semi-skilled workers. There will be decreased markets for this type of labor." (Connecticut Takes Stock for Action; Connecticut Inter-Regional Planning Program, Connecticut Development Commission, page 7). The independent institutions, particularly in the New England area, have assumed the greater load in the past. The independent institutions are not growing fast enough to meet the demand. The cost in the independent institutions is beyond the means of many seeking an education beyond high school. In the 1966-1967 academic year, enrollment in public institutions of higher education for the first time in Connecticut exceeded that in the independent institutions.

The state is being pressed from all sides:

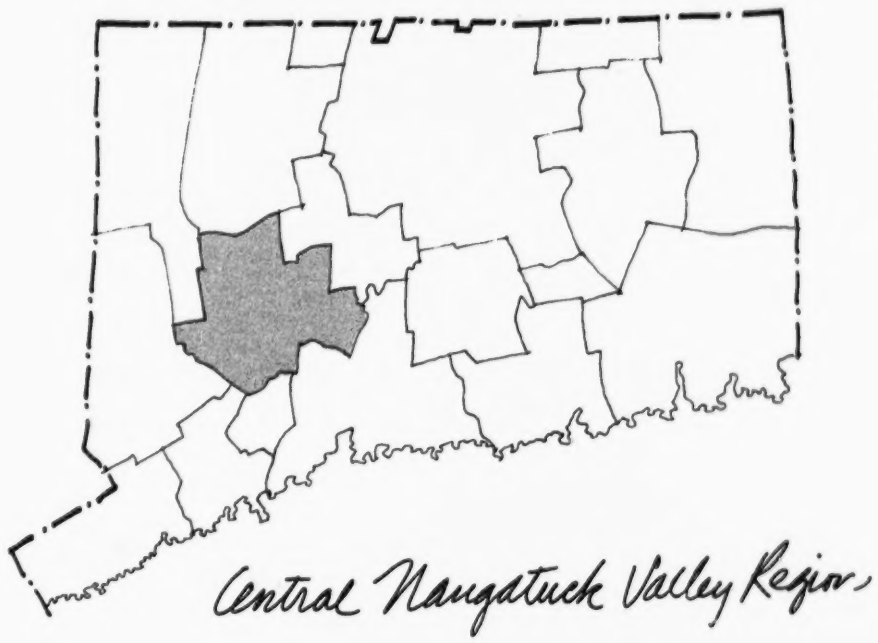
- Emphasis is placed on continually improving the available opportunities in higher education.
- The projected increase in population indicates a parallel increase in enrollment.
- The desire (and need) for an education beyond high school is growing; proportionally more high school graduates are going on to colleges and universities.
- The cost of providing opportunities in higher education is rising.
- The cost of all aspects of governmental activity is rising, placing an overall strain on the present tax structure.

The Governor and State Legislators are finding ways and means of meeting the need but, at the same time, they

are asking that the tax dollar spent on higher education be spent wisely and efficiently.

In March 1967, the Commission for Higher Education, interested in both an improved opportunity in higher education and the efficient use of state resources, proposed a two-part program to meet the needs for higher education in the Central Naugatuck Valley Region of the state.

The first part sought to establish a community college component in temporary facilities with an effective operational date of September 1967. The second recommendation called for developing a concept to meet the special needs of higher education in the region. The concept was embodied in a proposed center for higher education which would combine the sites, buildings and/or programs of the one new and two existing public institutions. The Center would provide a framework for developing new approaches to higher education. Governor John Dempsey endorsed the two-part program saying, "This is the type of fresh, common sense appraoch which I feel must be applied if we are to meet Connecticut's needs in responsible and equitable fashion. The proposal is imaginative and may well provide a prototype for higher education facility planning throughout our state."



Although the Higher Education Center concept was originally proposed by the CHE, the Commission directed that the parties involved be responsible for evaluating and developing the concept in a manner appropriate to the participating institutions. The potential of the concept has been developed over the past year under the direction of the Central Naugatuck Valley Region Education Center - Organizing Body, established by the Commission for that purpose. Membership of the Organizing Body includes representatives of each of the constituent units of the public system of higher education: the Board of Trustees for State Technical Colleges, the Board of Trustees for State Colleges, the Board of Trustees for the University of Connecticut, the Board of Trustees for Regional Community Colleges, and the Commission for Higher Education. The Commission charged that, in developing the Center, the Organizing Body should not foreclose future development by too narrowly defining the initial stages.

The Organizing Body has performed an essential coordinating function in the development of the Higher Education Center, bringing together the ideas and concerns of all those affected by the proposal. The Organizing Body is supported in this effort by the Advisory Committee

whose membership is intended to represent regional interests and to provide the appropriate application of higher education planning to the region. The Ad Hoc Subcommittee of professional educators was similarly constituted to represent faculty and staff of the present institutions in Waterbury and to draw on their counsel and experience.

Caudill Rowlett Scott was commissioned in early 1968 to develop and document the extensive efforts of the working committees. The CHE and all committees contributed to the utilization of existing data and to establishing the directions for the concept development that are included in the report.

The resulting development by Caudill Rowlett Scott was graphically presented to an evaluation conference called to discuss "The Potential of Sharing Physical Facilities Among Autonomous Institutions of Higher Education." The conference was funded by Educational Facilities Laboratories. Consultants were assembled from across the country, each having extensive experience in cooperative efforts among institutions of higher education. They were asked to evaluate:

- The concept of shared facilities,
- The application of the concept to the State of Connecticut, and
- The application of the concept to Waterbury in the proposed Higher Education Center.

The experience of each consultant was presented as it related to the ideas and problems being discussed. The conference was well attended by representatives of the component institutions and of the State Legislature. Further details are included in the Appendix.

The conference discussion brought to light the many aspects of shared facilities and consortia - both pro and con. Of the many consortia arrangements presently operating, few involve actual sharing of facilities; and, of those few, virtually none are in the public sector. Although many problems were noted, the consultants felt they were resolvable, and that the situation in Waterbury offered a unique opportunity to utilize the potential of shared facilities to provide expanded opportunities in higher education in the region. They noted that there are equally valid program/curriculum developments parallel to shared facility developments. The concept of sharing facilities offers a promising solution to meeting the facility requirement of higher education.

Of special note is the planning process represented in the development of the Higher Education Center concept. The normal sequence of events in facility planning is: need (students), program (curriculum), manpower (faculty and staff), facilities (buildings). The planning process for the Higher Education Center is reversed in the sense that the possibilities in sharing facilities among the four institutions in Waterbury has generated the opportunity for a new approach to providing facilities for higher education in the region. The problem is to arrive at a sharing of facilities that, along with accomplishing the advantages, will allow program developments, not restrict them.

1 The basis for cooperation is the common goal of providing opportunities in higher education related to the needs of society

Statement of Concept

The Commission for Higher Education has proposed, as one aspect of higher education system planning, that the constituent institutions of higher education consider the potential to be derived from sharing facilities while retaining their identity and autonomy.

The corollary is that the participating institutions can accomplish more and do it better, having a greater facility and faculty resource available to them. "An awareness of interdependence has developed as administrators and faculty have realized that some problems could be solved only through acting in concert." (Pressley C. McCoy, The Forms of Interinstitutional Cooperation, 54th Annual Meeting, Association of American Colleges).

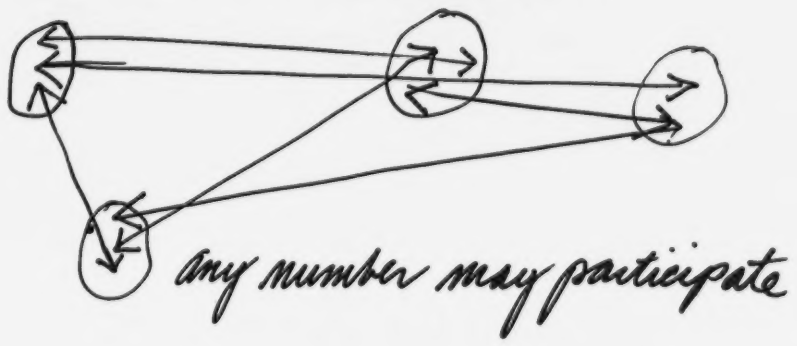
The sharing of facilities among institutions assumes the willing cooperative effort of the participating institutions. The basis for cooperation is the common goal of providing opportunities in higher education related to the needs of society.

The concept is not limited by the nature or background of an institution. Consideration of the concept includes sharing: Between institutions of the same system and/or of other systems of higher education, between public and independent institutions, between institutions of higher education and the public school systems, and between institutions and the communities of which they are a part.

Numerous examples of the sharing of facilities exist, particularly among the independent institutions. Perhaps the best known are the five colleges in the Connecticut River Valley of Massachusetts, the six institutions of the Atlanta University Center, and the Claremont Colleges in California. Oxford University in England is comprised of 31 colleges that are autonomous, yet share the advantages of their collective size. The independent institutions in Connecticut are among those actively developing consortia arrangements.

Base for Development

Two or more institutions willing to work together constitute a base for developing the potential of shared facilities. Any number of institutions can participate in a single sharing arrangement. A particular institution can be a part of any number of separate sharing arrangements. Any two institutions can have any number of separate sharing arrangements between themselves.

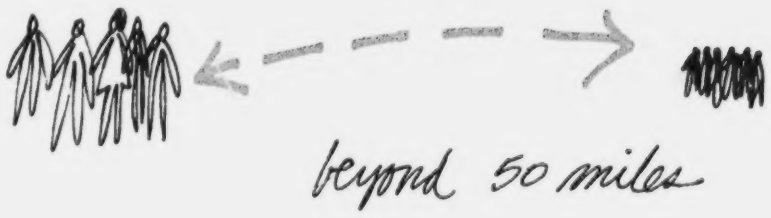


The number and kind of sharing arrangements appropriate to any development base depend on the reasonableness of

such arrangements for the institutions involved. The agreement to share facilities assumes a beneficial result to the participating institutions and their respective student bodies.

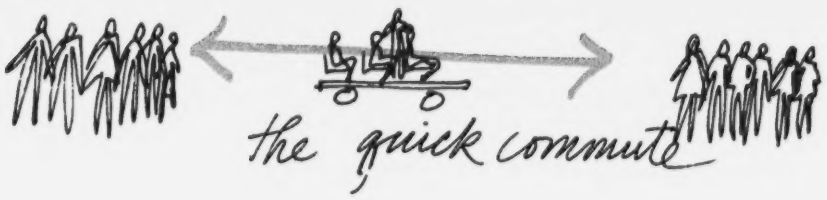
Possibilities for Sharing

The possibilities for sharing inherent in any base for development are determined by proximity. The possibilities are not precluded by distance; but, the greater the separation, the more restricted will be the flexibility and potential for effective development of shared facilities. "Thus, in the cooperative Three College Program, many more students go back and forth between Haverford and Bryn Mawr, which are only a mile apart, than from either college to Swarthmore, which is a distance of seven miles from either." (Frank W. Putman, 54th Annual Meeting, Association of American Colleges.)



Institutions separated by more than 45 minutes travel time are severely limited in developing shared facilities. Frank W. Putman suggests that 50 miles is an "almost insurmountable barrier," (paper presented to the 54th Annual Meeting, Association of American Colleges, Inter-institutional Cooperation in the Natural Sciences.) Sharing, in this instance, is appropriate only as it relates to the joint use of expensive and/or highly specialized facilities or equipment. Faculty move, rather than students, to facilitate sharing. Student and faculty scheduling must be in blocks of time rather than by periods.

Travel time of less than 45 minutes allows more opportunity for sharing. Scheduling is restricted only in that one period must be available between classes at separate institutions to allow travel time. Practically, block scheduling still makes sense in order to limit the amount of travel.

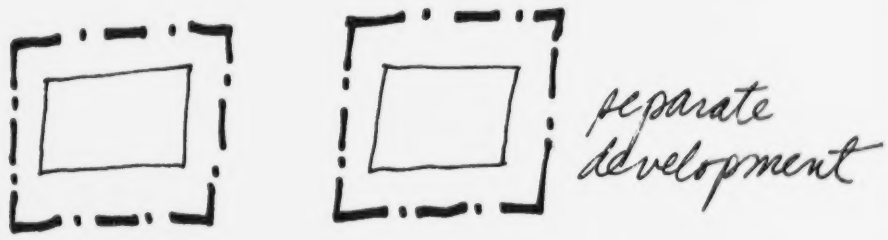


Where two institutions are close enough to allow automobile travel between campuses during class change intervals, the possibilities further increase. All facilities can be available to all students, particularly if they are commuter institutions.

Separate institutions within walking distance of each other can be considered essentially as one campus. The linkage does not depend on vehicular transportation. All facilities can be available to all students.

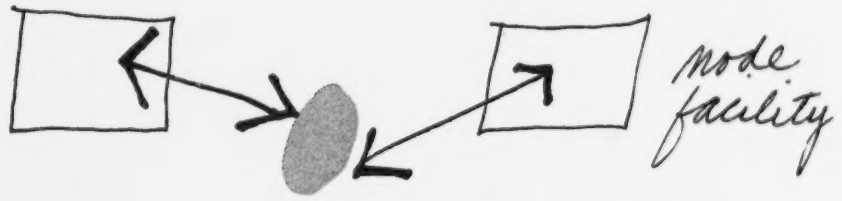
There are several options for multiple institutions on the same or adjacent sites:

Two or more institutions on adjacent sites could be developed separately. The potential for sharing their facilities would be limited. The possible facility resource available to the student would be similarly limited.

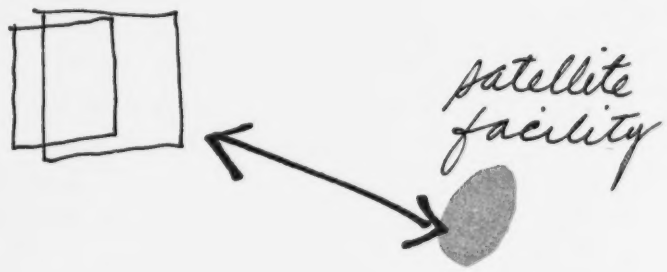


On the other hand, the maximum opportunity for sharing is realized when the two or more institutions share the same facilities on the same site with all facilities available to all students. Sharing becomes as informal as sharing among the individual schools in a large university. A common site assumes joint development of facilities to meet combined needs with sharing of facilities a basic assumption in determining that need.

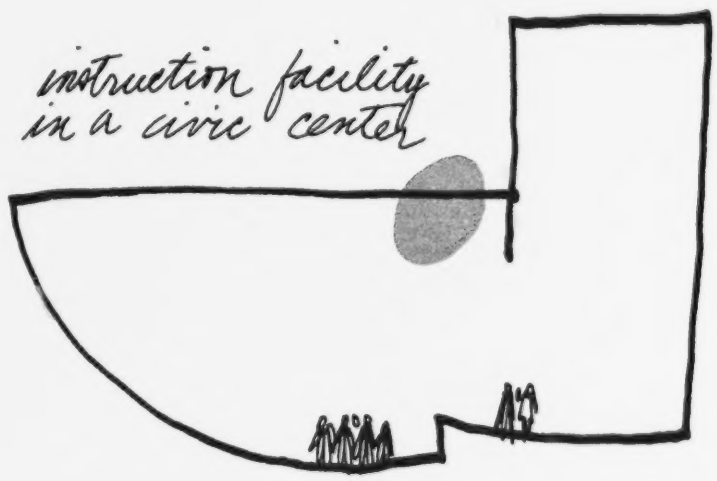
A shared facility can be jointly developed by two institutions as a central, or node, facility located on a site separate from either institution's campus. The shared facility in this case assumes a function requiring a specific location related to the activity involved rather than to either institution.



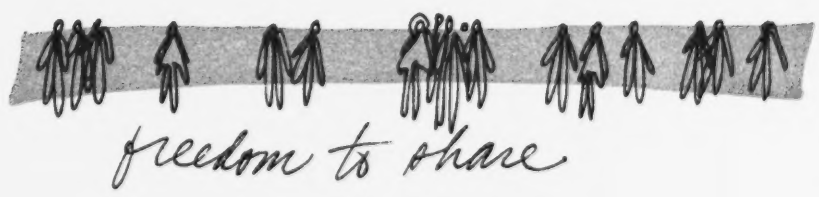
In the case of multiple institutions on the same site, the node becomes a satellite facility on the base campus.



The node facility makes sense when the location of an activity is important to the effectiveness of that activity, not necessarily related to a base campus. An example of such a facility would be a higher education drama instruction facility located in a community civic center, utilizing the resources of such civic facilities.



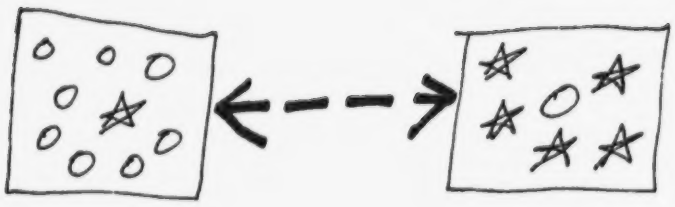
The possibilities for sharing facilities open up similar possibilities in faculty, program, and/or curriculum sharing. The concept of sharing facilities allows, but does not require, the corresponding integration/interaction of the respective institutions.



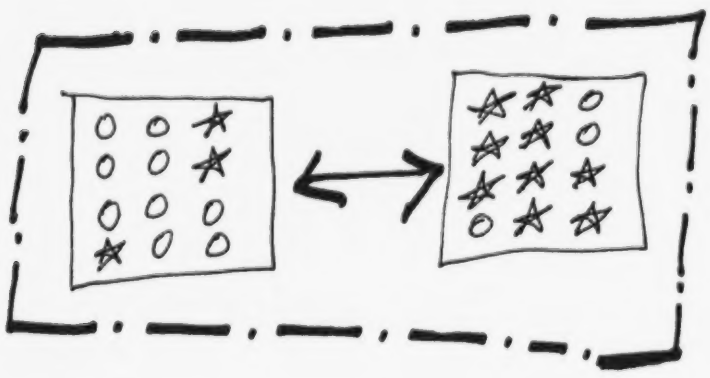
Students

The test of any system, institution, or combination thereof, is the opportunity made available to the student. The degree to which that opportunity can relate to the student's need, in terms of offerings and content, is a measure of the quality of higher education. The student stands to gain in a sharing of facilities because of a greater facility and faculty resource available to him.

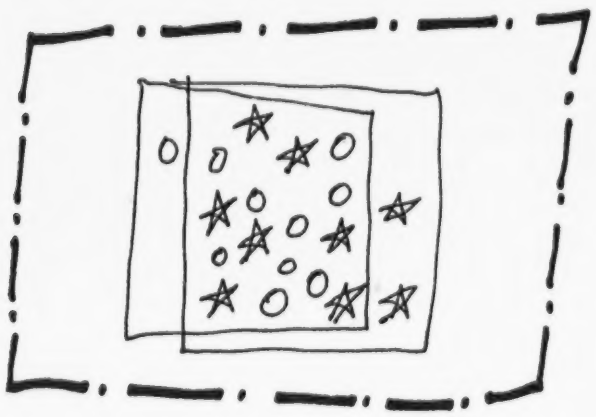
Generally speaking, the students of any one institution come from similar backgrounds and are pursuing similar goals, thereby limiting the student's experience. Facilities sharing is an opportunity to mix students of different backgrounds, dissimilar goals, and individual approaches to education, represented by the participating institutions. The effectiveness of this mixing depends as much on the type of sharing as on the amount of sharing. Even with the maximum opportunity for sharing (institutions on the same site with all facilities available to all students), students can be programmed in such a manner that mixing occurs only in the corridors and not in the classrooms. For mixing to be effective, there must be meaningful and purposeful interaction.



There is little or no interaction with separate development on separate sites. The sharing of facilities would allow limited interaction.

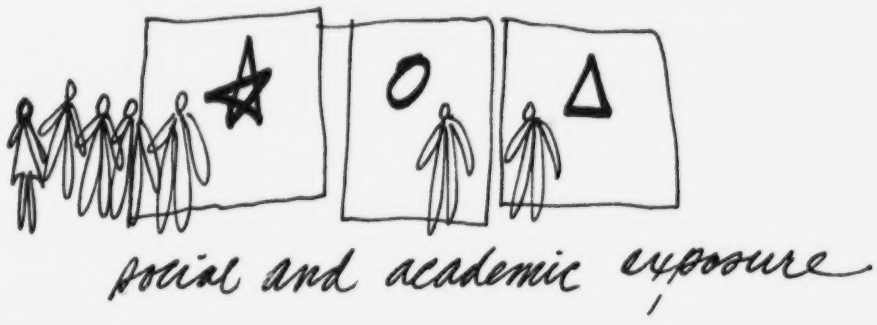


Separately developed facilities on the same or adjacent sites, with limited facility availability to students, allow limited interaction of students. Such interaction might be termed formal since it depends on students moving between institutions in scheduled classes.



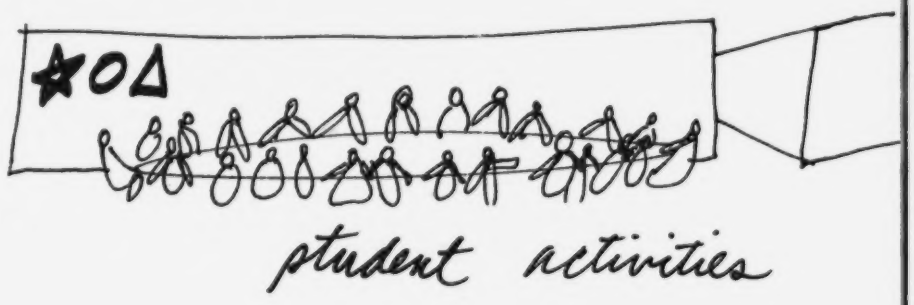
Jointly developed facilities on the same site, with unlimited facility availability to students, allow informal, automatic interaction of students as a normal result of everyday activity.

The interaction of the students from separate institutions is an opportunity for experiences and relationships encompassing the spectrum of society. The students of a participating institution might still tend to group together because of their commonality of purpose. The social and academic exposure to those of another institution becomes an extension of their experience. A potential engineering doctoral candidate can learn from association with an engineering technician associate degree candidate. They will be learning from and working with each other after graduation.

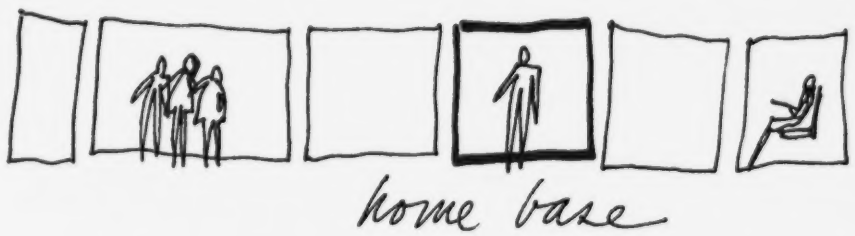


The student attending an institution identifies with that institution through his interaction with the institution's students, administrators and faculty. This identification depends on people more than on buildings. The sharing of facilities, even with two institutions on the same site, does not essentially jeopardize a student's identification with his respective institution.

Buildings, from the standpoint of student identity, become the backdrop for the interaction of students in meaningful activity. The planning of buildings can allow and reinforce the desirable relationships among students, faculty and administrators.



The student needs a "home base" in any institution of higher education. This can be a dormitory room or a work station in the library. A home base is particularly important when facilities are shared, as it becomes the student's reference point to his respective institution. The location of the student's home base determines and allows the interaction necessary to identity.



Faculty

Sharing facilities can be accompanied by sharing of faculty, thus making the combined faculty resource available to accomplish a given task. Qualified faculty, from their respective backgrounds, working cooperatively, will arrive at new and better opportunities in higher education for the students of the participating institutions.

Frank W. Putman, writing on the subject, "Interinstitutional Cooperation in the Natural Sciences," speaks of the "critical mass concept." He suggests that faculty are the fuel and must be in sufficient quantity and quality to maintain a self-sustaining, controllable reaction. The individual institution, even the very large one, seldom has all the elements within a particular subject area to be totally self-sufficient. The sharing of faculty resource can approach the ideal.

The implications of faculty sharing are noted as follows:

- The amount and type of sharing depends on the self-determination of the participating autonomous institutions. It can occur only to the extent the institutions allow it to occur. The individual autonomous institution determines the amount and appropriateness of faculty sharing with other institutions as one aspect of its growth and development.
- The opportunity exists for sharing of faculty competencies and specialties. The faculty, interested in providing the best possible educational opportunity, will develop the mechanism for effective sharing with the student's welfare in mind.
- The opportunity exists for meaningful interaction among faculty of different backgrounds and assignments, learning from and stimulating each other.
- Since the institutions retain their autonomous organization, the individual faculty member is hired, fired, and subject to the policy of his respective institution.
- The complications resulting from differing faculty, differing salary schedules, conflicting administration policies, differing course loadings, etc., can be resolved by qualified people working together to do a better job. The faculty members are essential to the effective development of shared facilities since they are the ones who will make it work.

- Older, more developed institutions will tend to have faculty with more "status". This status will come to all as the participating institutions work and develop together.
- Institutions in a consortia arrangement, having access to a greater faculty and student resource, will have a greater holding power to retain faculty and a greater appeal in attracting new faculty.

The Participating Institution

The integrity of an institution's educational objectives must be maintained, and it depends on the quality of that institution – not on buildings or address. The integrity of sharing institutions can, in fact, be supplemented and reinforced by the interaction with other institutions. Sharing facilities does not necessarily jeopardize an institutions's educational integrity.

The sharing of facilities enables the small institution to have some of the advantages of a larger institution without abandoning its smaller size. The facility resource available to the individual institution becomes the combined facility resource of all the participating institutions.

Elden L. Johnson, Vice-President of the University of Illinois, comments on the subject of consortia in higher education in the Fall '67 Educational Record: "Another potentiality applies to the institution itself – a more sensible division of labor among cooperators, an avoidance of duplication, a sharing of costs and risks, and a capitalizing on the economics of scale." Mr. Johnson notes some limitations – one being that of institutional self-interest. "Institutional self-interest takes on added importance because the partnership is, ordinarily, not staffed nor empowered to act on its own; it must act through its members."

Institutions, cooperating voluntarily, can accomplish whatever they agree to accomplish. The limitation is in desire, not in power – in fact, institutions sharing facilities and acting in concert have significantly more power than the aggregate total added separately.

Program-Curriculum

The concept of sharing facilities generates the potential for joint development of program and curriculum to the benefit of the students. Normally, such program development would precede and determine facility requirements. In the instance of shared facilities, the sharing generates the potential for joint program/curriculum development not otherwise possible.

Assuming that two or more institutions wish to develop the potential of sharing their respective facilities, the participating institutions will find a duplication of effort that can be eliminated and/or areas of responsibility already being met by one or the other. An excellent example is the consortia between Ottawa College and Baker University in Kansas. One college excels in its physics facilities and staff, the other in chemistry. Each has the resource available from the other.

Cooperative, joint program/curriculum development could:

- Assign certain program/curriculum areas to the respective institution that can do the job better, leaving the other freer to concentrate its resources on developing its own strength.
- Allow more comprehensive programs than those developed separately or individually.
- Increase the extent and comprehensiveness of the curriculum resource available to the student.

Joint curriculum development is a form of consortium. The concept is well known and successful across the country. According to Dr. Raymond Moore, previously of the U.S. Office of Education, there are more than 1200 separate cooperative arrangements existing in the United States. Morris Keeton, in a paper presented at the 54th Annual Meeting, Association of American Colleges, writes: "Cooperation among colleges appears to be almost universally accepted now as an efficient way of enriching college programs and sometimes as a way of actually reducing instructional costs." The concept of shared facilities increases the possibility for developing workable consortia arrangements since more options are thereby made available.

Facilities

Every institution requires a complement of facilities: classrooms, laboratories, lecture rooms, auditoriums, etc. Each institution tailors these facilities in design and quality to its respective educational program.

The smaller institution is limited in facility resource because of the limited enrollment base. Multiple smaller institutions in the same area, jointly developing shared facilities, realize the increased facility resource justified by the combined enrollment base.

Administration

The sharing of facilities must be administered. Solutions to administrative and organizational problems will be developed and agreed upon by the faculties and administrators of the participating institutions. Foreseeable problems,

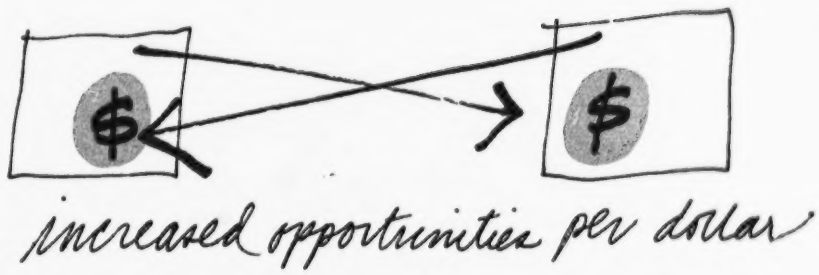
such as scheduling available space among institutions and acquisition policy in areas such as the library, are resolvable.

The concept of sharing facilities provides increased educational opportunities per tax dollar expenditure.

Assuming shared facilities, four cost/benefit alternatives for the state are apparent:

- Present facility capacity can be increased and future facility requirements can be fully justified because of increased utilization.
- More facilities can be made available under a given expenditure policy because of increased utilization – a proportional balance with present expenditure policy.
- More comprehensive facilities can be made available under a given expenditure policy because of increased utilization – again a balance with present expenditure policy.
- A broader range of facility types can be provided on the basis of the greater enrollment base in each case of sharing – a probable increase over the present expenditure policy, but a compounding increase in benefits to students.

Funding



Precepts for Development

- The base for sharing facilities depends less on proximity than on the willingness of the individual institutions to work together to do a better job. However, the proximity generally affects the degree of sharing reasonably possible.
- Facilities on the same site and all facilities available to each institution allow the maximum flexibility and potential for all concerned.
- The interaction of students and faculty from separate institutions affords opportunities for broader experiences.
- Student and faculty identity with an institution depends on the people with whom they interact rather than on buildings.
- The administrative problems associated with sharing facilities are resolvable.
- The autonomy (identity and integrity) of an institution depends on the people and program quality of that institution rather than on the facilities of that institution.
- The concept of sharing facilities allows the participating institution to jointly develop programs and curricula to the mutual benefit of each, offering more comprehensive opportunities to the student.
- The concept is consistent with the necessity for financial responsibility on the part of higher education.
- The concept of sharing facilities among autonomous institutions of higher education is a valid means of increasing the educational opportunity in the state.
- Cooperative program/curriculum development, directly related to the shared facilities concept, is a valid means of increasing the educational opportunity in the state.

2 The application of the concept depends on the proximity of institutions and the appropriateness of facility sharing

Statement of Application

The sharing of facilities is one aspect of system planning for higher education in Connecticut. The application of the concept depends on the proximity of institutions and the feasibility of facility sharing. The effectiveness of the concept application depends on the willingness of the participating institutions to cooperate. The proximity of institutions in Connecticut allows the possibility of some degree of sharing facilities for each institution in the state.

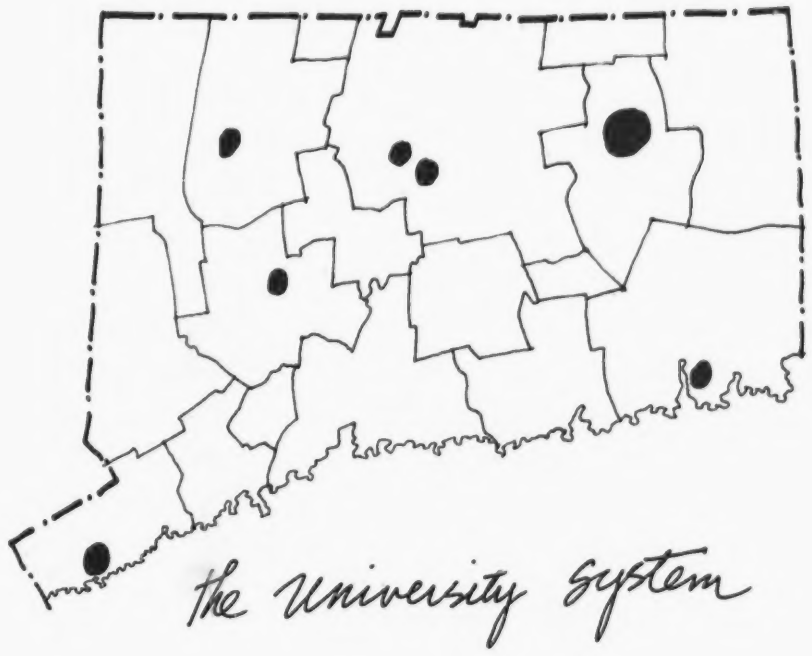
Higher Education in Connecticut

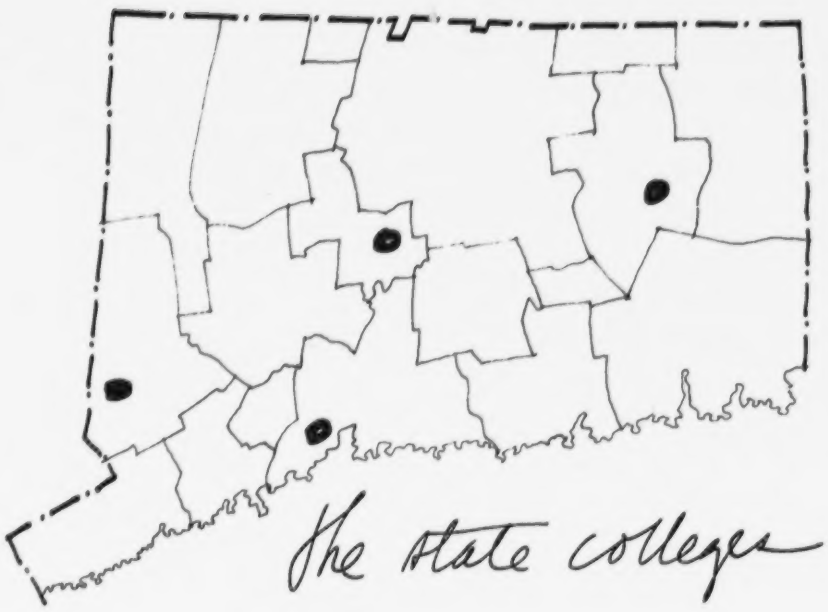
The 1965 General Assembly defined a state system of higher education of constituent units. A fifth unit consists of the independent institutions throughout the state.

The university is exclusively responsible for ". . .programs leading to doctoral degrees and post baccalaureate professional degrees. . ."

The University system consists of the University of Connecticut at Storrs and five two-year branches. The branches are local attendance centers offering the lower division university program. No additional branches are planned. The medical-dental school is presently under construction in Farmington.

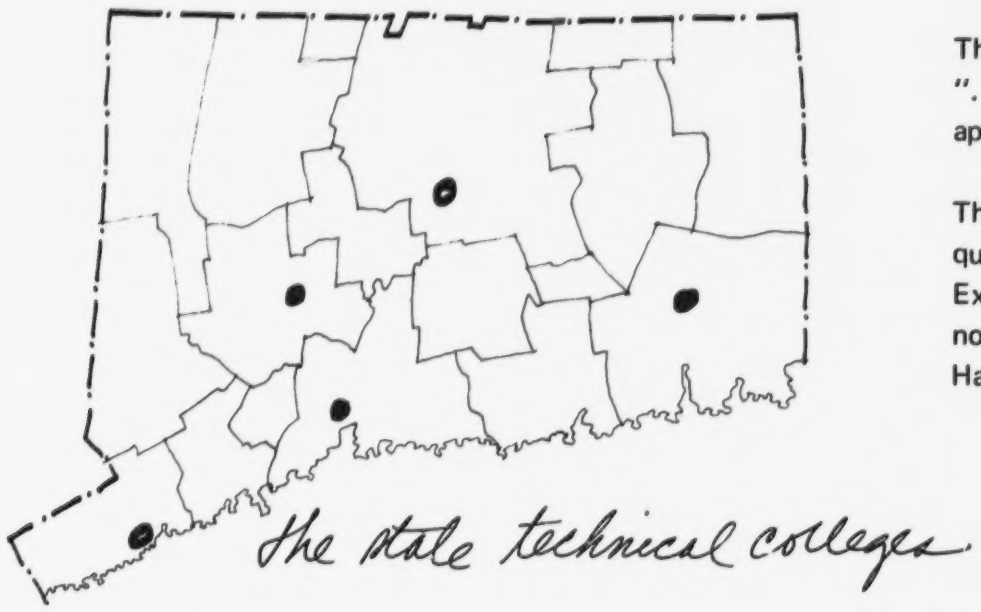
The undergraduate and graduate programs will continue with increasing emphasis on upper division and graduate programs. Lower division work will increasingly be centered in the university branches and other components of higher education. The emphasis on continuing education will shift to meet the needs of the urban society.





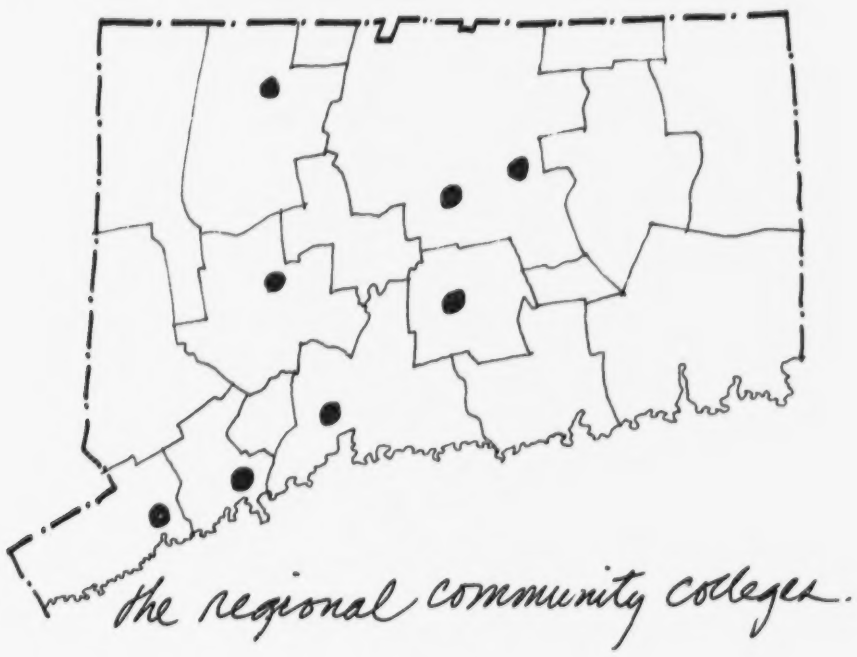
The State College system has the ". . . special responsibility for the preparation of personnel for the public schools of the state including master's degree programs and other graduate study in education, and authority for providing liberal arts programs. . ."

There are four state colleges presently operating with some new locations and some possible relocations being discussed.



The State Technical College system is responsible for ". . .programs leading to the degree of associate in applied science. . ."

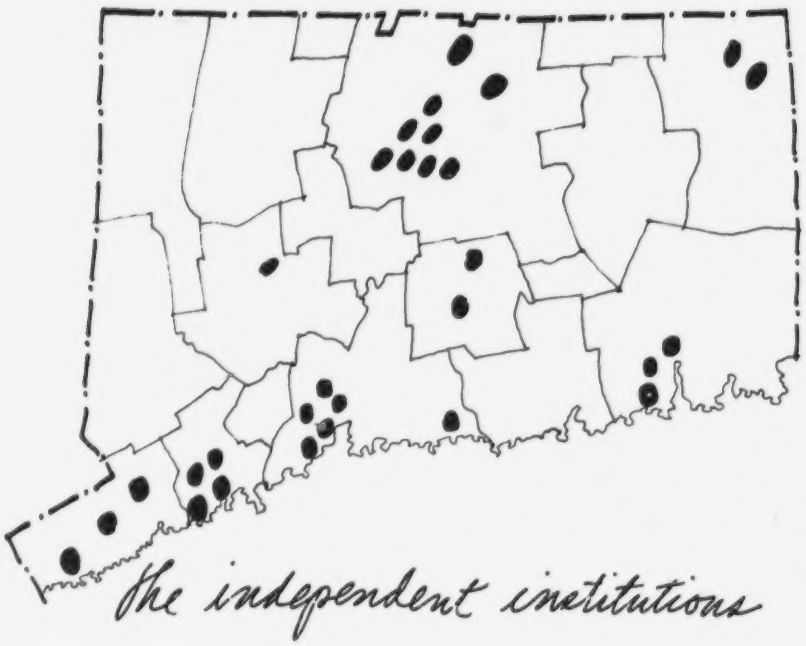
The technical colleges are two-year institutions providing qualified engineering technicians to Connecticut industry. Extensive evening programs are offered. Four colleges are now in operation with a fifth authorized for the New Haven area.



The Regional Community College system has ". . .special responsibility for providing programs of study for college transfer, terminal vocational, retraining and continuing education leading to occupation certificates or to the degree of associate in arts and in sciences. . ."

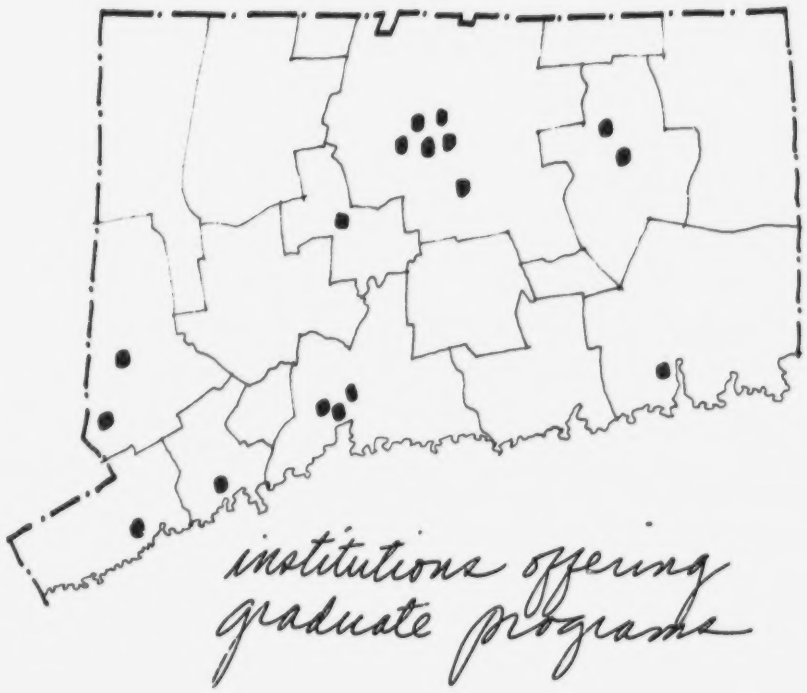
The community colleges offer two-year career-oriented and transfer programs. Seven community colleges are in operation, with an eighth to open in New Haven in September, 1968.

The independent institutions in Connecticut are well established and offer a variety of programs ranging from two-year through doctorate. These institutions are flourishing and will continue to be an essential element of higher education in Connecticut.



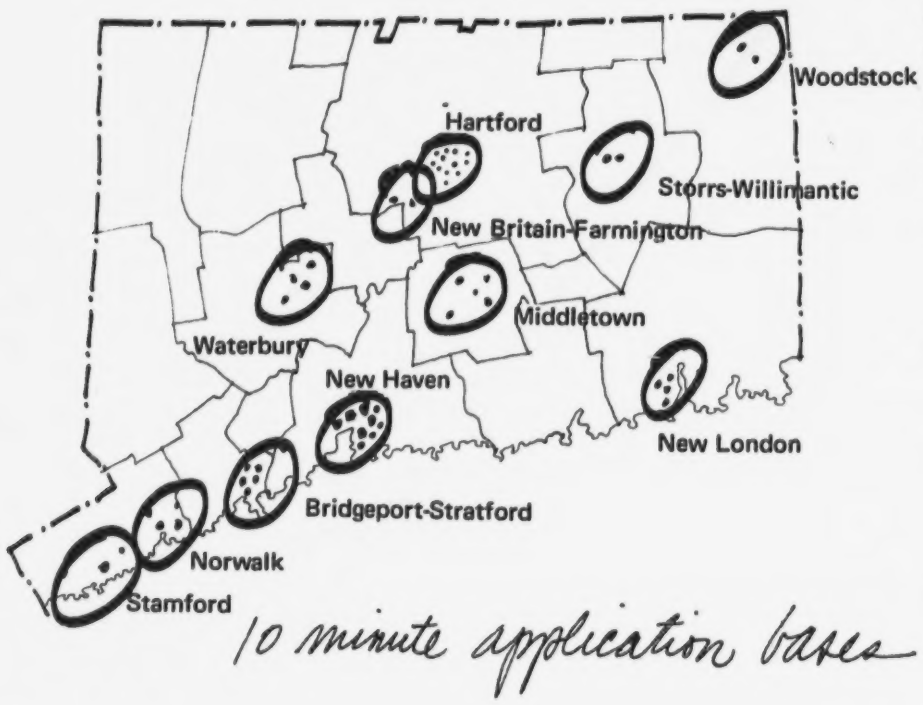
the independent institutions

There are seventeen institutions of higher education in Connecticut offering graduate programs. Four of these are exclusively graduate schools and are valid in the consideration of sharing facilities.

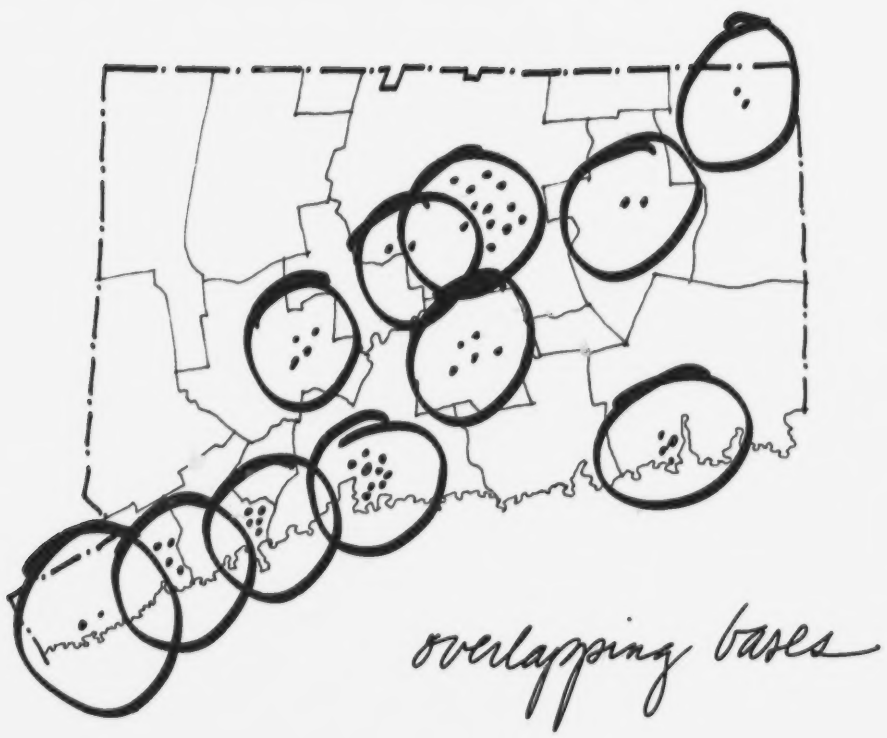


institutions offering graduate programs

Existing Bases for Application



10 minute application bases



overlapping bases

Actually, the possibilities for sharing facilities are infinite since a "base" for the concept requires only reasonable proximity and a common need between two institutions.

A composite map of Connecticut higher education institutions identifies the potential existing bases for developing shared facilities. The following identifies only those bases which institutions are within approximately 10 minutes travel distance of each other.

- At Stamford, a university branch and an independent institution.
- At Norwalk, a state technical college, a regional community college, and two independent institutions.
- At New Haven, a state college, a community college, a technical college, five independent institutions, and an independent graduate institution.
- At Waterbury, a university branch, a state technical college, a regional community college and one independent institution. Detailed consideration is given the development of shared facilities in Waterbury, beginning on page 27.
- This development will serve as a guide to similar detailed developments in other areas identified for concept application.
- At New Britain-Farmington, a state college and the medical-dental complex of the university.
- At Bridgeport-Stratford, a regional community college and four independent institutions.
- At Hartford-West Hartford, a community college, a technical college, a university branch, seven independent institutions, and two independent graduate institutions.
- At Middletown, a community college and two independent institutions.
- At New London, a university branch, the Coast Guard Academy and two independent institutions.
- At Storrs–Willimantic, the University of Connecticut and a state college.
- At Woodstock, two independent institutions.

If the proximity base is expanded beyond the limits of ten minutes travel time, adjacent base areas begin to overlap, allowing still more sharing arrangements.

The independent institutions are included in the Bases for Application as a suggestion only. The Commission for

Higher Education has no jurisdiction, except that related to accreditation, in connection with these institutions. The noted location within an area does present the opportunity for sharing facilities; some opportunities, of course, are more real than are others. There could be difficulties in sharing facilities between public and independent institutions; hopefully, these could be successfully resolved considering the benefits to be gained.

As each institution or system of higher education grows, new facilities are required to service the increased demand. Maximum use and value can be realized from these capital improvements with proper consideration of the potential for sharing. This implies joint development as well as joint cooperation among institutions. Any building program should be related to the needs of the cooperating institutions, not necessarily the facility needs of an individual institution, although they may be one and the same.

The system of state colleges anticipates the need for new campuses, and possible relocation of an existing campus. A number of regional community colleges have no permanent campuses and other colleges are yet to be located. Significant advantages can be realized in locating new institutions or relocating existing institutions, considering the potential of shared facilities in determining new locations. Benefits can accrue to both the new and existing institutions in the process.

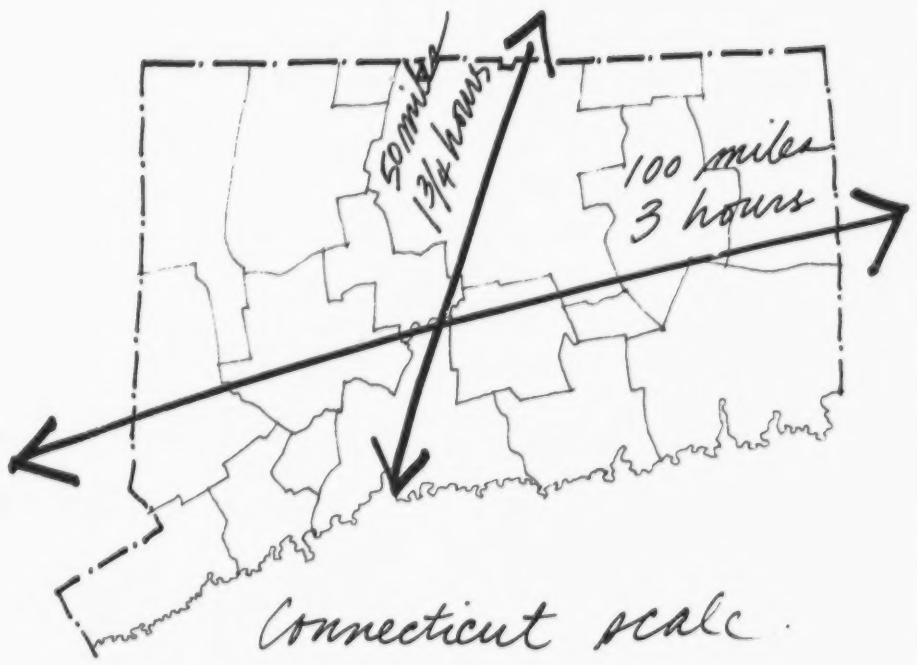
Development Applications

Statewide Planning

The scale of Connecticut is such that the entire state is the basic planning region when coordinating and developing a system for higher education.

Planning should be on a statewide basis: Hence, joint/cooperative development is not limited to a local area.

To most effectively develop the concept of sharing facilities, needs should be related to the provision of facilities for higher education, rather than to the provision of facilities for an individual institution. This process relates to long-range planning for higher education - the programs and curricula to be offered, and the capabilities of the faculty at the respective institutions. The Commission has a vital role to play in encouraging and coordinating the planning for higher education among the multiple constituent systems and institutions on a statewide basis.



The system for higher education is composed of multiple component systems and multiple institutions. They are autonomous; they grow and develop according to the demands of students, the capabilities of faculty and staff, and the balance required between disciplines.

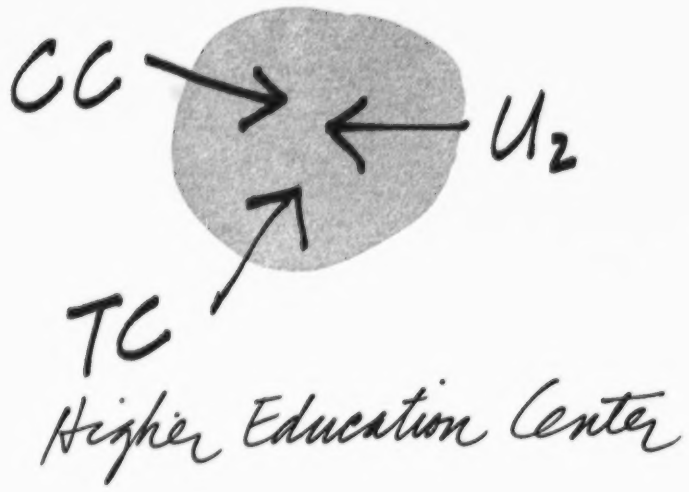
Precepts for Development

- There are multiple existing opportunities in the state for realizing the potential of sharing facilities.
- The potential for sharing should be a consideration in developing capital improvement programs for individual institutions.
- The potential of sharing facilities should be a consideration in the creation or relocation of institutions.
- The CHE, as the coordinating agency, has a vital role to play in insuring the maximum use of state resources in meeting the demonstrated needs.
- The individual constituent boards have the major role to play in determining the exact areas of cooperation, including the extent of facility sharing.

3 The concept applied to the CNVR is open-ended. The real direction will take form as the participating institutions interact.

Statement of Application

In applying the shared facilities concept to the CNVR, a number of possibilities are presented. The basic alternatives are identified. Undoubtedly there are even more combinations to be worked out, and no attempt is made here to answer all the questions nor to predict the ultimate potential. The concept applied to the CNVR is open-ended. The real direction will take form as the participating institutions interact with each other to provide the higher education opportunity.



The Commission for Higher Education has proposed that a Higher Education Center be considered as the means of serving the CNVR. Such a center would develop the potential of sharing facilities among the four institutions. The program/curriculum offerings of the Center would serve the total higher education needs of the region. The enrollment base is 5000 students in 1975 in the three public institutions.

The situation in Waterbury is unique:

- The four two-year institutions are organized, operating, and productive, offering an excellent resource for development.
- The present institutions are different from each other. The institutions working cooperatively would be a consortium of unlikes.
- Substantial growth is projected in the number of students, programs, and facilities.
- The opportunity exists to increase significantly the benefit to the individual student and the community.
- The present institutions are autonomous and all are to retain that autonomy.
- An expanded and more comprehensive role and scope can be accommodated by the four institutions working together because of the following:

  Substantial increase in enrollment.
  The corresponding increase in educational programs.
  The greater institutional resource available as a result of cooperative development.

Base for Application

The Central Naugatuck Valley Region offers all the necessary ingredients for developing the potential of the shared facilities concept. The resources are there; the need exists; the desire is evident, and the community is concerned that it have adequate institutions of higher education. The access to and within the area is excellent due to the recent completion of Interstate 84 and State Highway 8 through the region. (Refer to Appendix for additional significant facts about the region and Waterbury applicable to this study.)

The Central Naugatuck Valley Region presently includes four on-going productive institutions of higher education, offering an excellent base for applying the concept of sharing jointly developed facilities. Post Junior College and the three public institutions (the Waterbury Branch of the University of Connecticut, Waterbury State Technical College, and Mattatuck Community College) are two-year institutions.

Post Junior College is an independent, non-profit, institution with associate degree programs in liberal arts, business administration, and secretarial science. The programs are offered during the day, in an evening division, and to some extent during summer sessions. All programs are transferable. Post students are both commuter and resident. Present enrollment is 559 students.

Present Post facilities, on a 46-acre site, include dormitories, a classroom building, a library building, and an administration building. Temporary classrooms will be eliminated as new buildings are available. Presently planned are a science building and a student center/cafeteria building.

The university branch draws commuting students from a distance of 25 miles to its lower division university program. Facilities of the branch are utilized for university graduate programs. Admission policy results in a student body drawn largely from the upper 25% of high school graduates. Present enrollment is 650 full-time equivalent students with 30 full-time and 14 part-time faculty. Ultimate growth is limited by policy to 1000 students to be reached by 1975, with 70 faculty.

The branch is located on a site of six acres, convenient to downtown Waterbury, with limited expansion potential because of surrounding development. Parking is available for 45 cars. Present facilities are permanent and include a classroom/library building, science engineering building, and a student union building. Facilities projected include a separate library building. Desired facilities are a gymnasium and an auditorium.

The technical college is located on a site of 21 acres, approximately 15 acres of which are buildable. Parking is provided for 650 cars. Present facilities include a small library, classrooms, drafting rooms, cafeteria, well equipped laboratories, and an IBM 1620 computer with a 360 computer anticipated. Currently projected facility requests include additional classrooms and laboratories, combination gymnasium/auditorium, athletic field, and

faculty/administrative offices. Desired facilities include a large library, a student union, and additional athletic fields.

The present enrollment is 459 full-time day students, 414 part-time evening students. Faculty numbers 30 full-time, 38 part-time. Currently, 30%-35% of the students transfer to other components of higher education. Approximately 5% are in residence in Waterbury. Projected enrollment for 1975 is 740 full-time equivalent students. Ultimate enrollment is anticipated at 900 full-time equivalent students. Students are generally drawn from the middle 50% of the high school graduates. Curriculum expansion will be into mechanical and industrial technician fields. Presently, chemical technology is available in Waterbury, but not in the Hartford Technical College. The service area for such programs extends beyond the region.

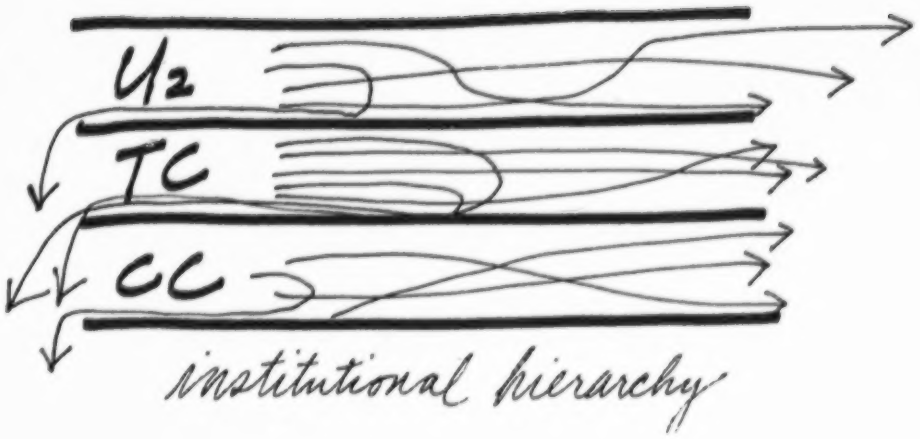
Mattatuck Community College, established in September 1967, is located temporarily in Kennedy High School and is limited to operation after normal public school hours.

Admission policy is presently "open door" to all high school graduates. There is no limit to the institution's service area. Present enrollment is 288 full-time and 224 part-time students, and eight full-time and 40 part-time faculty. Enrollment is projected at 1500 full-time equivalent students by 1975, and 2500 ultimately. The present program, initiated in September 1967, provides a general education, a transfer program, and a beginning offering in career-oriented areas.

The state colleges at New Britain and Danbury are not discussed here as part of the base for developing the Center. The relative proximity of each to the proposed Center will allow for limited sharing arrangements with these institutions.

Although the Commission's proposal in 1967 has resulted in some cooperative efforts among the institutions, the historically separate development in the same area results in the following:

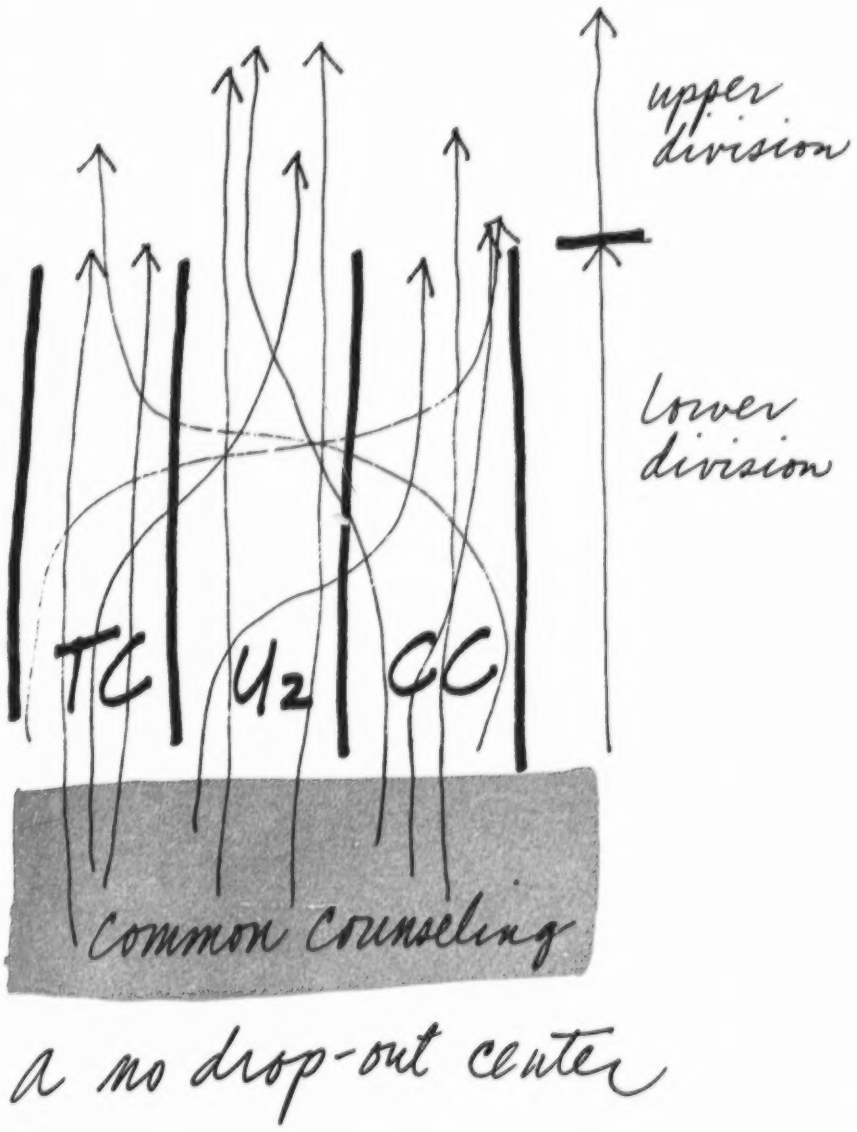
- Duplication of facilities and less than full utilization of some of them .
- Less than comprehensive facilities because of four separate enrollment bases.
- A possible competition for funds to meet the common need to provide the higher education opportunity.



An institutional hierarchy is apparent among the public institutions in Waterbury, reflecting the admission policies of the respective institutions. This hierarchy is consistent within any one institution, including students, faculty, administrators and curriculum. Movement within a single institution is relatively easy, but movement between institutions is restricted by the separate development. Transfer from one institution to another is, as a result, the exception, rather than the rule.

Students

Students attending the Waterbury colleges fall into distinct academic classifications and are pursuing similar goals, The university student is concerned with a four-year program, the first two years of which he can take in Waterbury. The community college student is in a two-year framework more oriented toward terminal occupational programs and transfer to state colleges and universities. The technical college student is also two-year terminal, but is oriented to engineering and manufacturing technologies.



The Higher Education Center takes advantage of the existing institutional hierarchy to provide unlimited vertical movement. Horizontal movement is developed by common counseling. The Higher Education Center could become virtually a "no drop-out center." Multi-channel possibilities can be developed to relate to an individual need. The chances for success of an individual student are increased because of easy movement from one channel (institution) to another.

Positive programs of student interaction (mix) can be developed to relate this higher education experience to the society of which they will eventually become a productive part.

The really great advantage of the institutions cooperatively developing in a Higher Education Center is the possibility of offering a rich spectrum of opportunities that will allow students to move from program to program as their needs require. To accomplish this, student services (admissions, counseling, placement and financial aid) could be centralized by common consent. Post could have some participation in this counseling activity. These services could be easily coordinated and operational by the time the Center becomes a reality.

Faculty

The advantage of the Center to the faculty of each institution includes the possibility of a coordinated program in instructional technology, instructional media, instructional resource, film, television, etc. These faculty services can be thoroughly developed whereas separately such development would be limited. The opportunity exists for the faculties of the participating institutions to work together, learning from each other and arriving at new ways to provide an improved opportunity in higher education.

Institutions

The several institutions should jointly develop their combined facility requirement to their mutual benefit. Each institution would retain its autonomous organization separate from those of the other institutions. Each would retain its own programs, administration and faculty.

The role and scope of each participating institution requires careful, continuous definition in relation to regional needs. Agreements can be jointly developed concerning role and scope to allow the institutions to specialize in the jobs they do best.

A more comprehensive facility and faculty resource would be available to accomplish the programs of the individual institution.

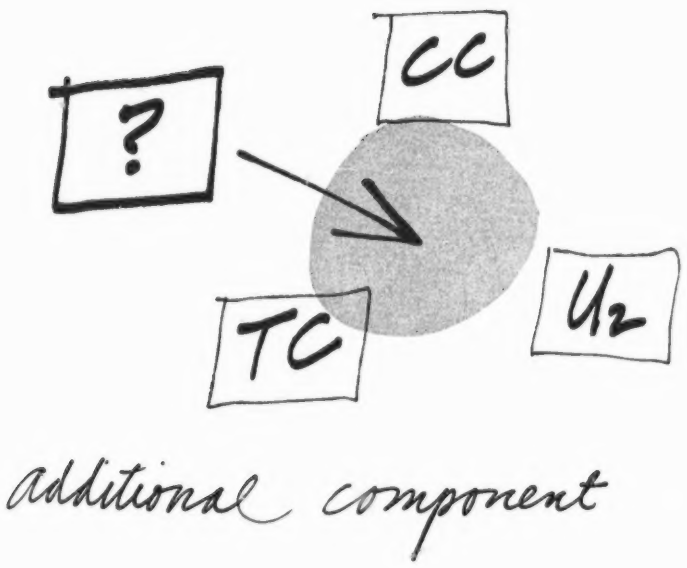
The participating institutions must together determine the way in which their cooperative efforts would be administered. The facility center and its centralized services, to be available to each institution, requires joint administration for that purpose.

The efficiency of centralizing certain administrative functions can be considered:

- Data processing services
- Recruiting of students
- Purchasing
- Receiving
- Campus security
- Physical plant services
- Public information

Program-Curriculum

Under the present circumstances, there is some duplication of curriculum among the separate institutions. This is particularly true in the areas of liberal arts and sciences. For example, community college students take English and other humanities courses and certain science courses which closely parallel those offered students in the university branch.



Uniqueness in each institution requires special structuring of certain curricula areas. Within the Higher Education Center, and by common agreement, duplication can be eliminated, where appropriate, in the humanities, mathematics and science programs, with responsibility assigned to the institution best able to do the job.

New programs will be developed in the Higher Education Center as the need arises in the Waterbury area. The established advisory group can continue to identify the regional need for opportunities in higher education. These new programs will be implemented by the component participating institutions or by other institutions as additional elements in the Center. Conceivably, an upper division institution could provide commuter-based upper division programs contrasting with the residence-based upper division opportunity available at the university. The important consideration is that, in site selection and subsequent planning, the possibility of an additional component institution(s) as an integral part of the Center should not be overlooked.

The projected growth of the demand for higher education in Waterbury and the concept of the Higher Education Center allows educational (program/curriculum) development to parallel the facility development. The framework exists to develop new programs and methods and is an open-ended opportunity. Curriculum and program can be integrated to a reasonable and desirable extent and can be mutually beneficial to the participating institutions.

Possible areas of program/curriculum enrichment are:

- Program development to reach and hold the ought-to-be student with multiple channels available for his specific need.
- Expanded computer instructional capabilities to all institutions.
- Interfacility program/curriculum development for the benefit of the student.
- Fine arts/liberal arts program available to technical college and community college students.
- Comprehensive instructional media resource, preparation, and distribution.
- Large group instruction capability with comprehensive facilities.
- Coordinated, comprehensive continuing education program.

Educational management concepts can be applied by the participating institutions to achieve optimum joint educational development corresponding to the joint facility development.

The facility needs of the participating institutions combine to become the facility needs of the Higher Education Center. The sharing institutions should jointly approach the Legislature for facility funding on the basis of their combined enrollment base.

The Higher Education Center development of the shared facilities concept also demonstrates the financial responsibility of the participating institutions. Unless a state has unlimited resources, particular and continuing attention must be applied to the effective use of approriated funds.

The Region

The Higher Education Center, having the resources of the four institutions available, can be programmed to relate positively to the needs of the region. Working together the institutions can comprehensively meet such needs, where separately such responsibility might easily not be assumed. Higher education, for example, must take an interest in the urban environment.

The community and higher education will mutually benefit from cooperative development of public facilities. The community might provide facilities; higher education might provide the programs and support. For instance, a portion of an instructional program in the field of health might be conducted in area hospitals, utilizing their facilities.

The possibilities of consortia between higher education and the community are here discussed in the Waterbury context. These are possibilities and, as such, may never become realities. Some may have already been explored and eliminated as neither valid nor appropriate. The participating institutions will determine the validity and/or appropriateness; the Center development should consider these and other possibilities. Waterbury is considering a Performing Arts and Community Center. Facilities would include a 200-seat theater, an 800-seat theater, meeting rooms, gathering and public spaces, and a historical museum, as proposed by the Waterbury Commission on Culture, July 1966. Higher education programs are compatible with the concept of such a center and, with the proper physical relationship, could be greatly advanced by higher education participation. The programs of the Higher Education Center would, in turn, benefit from the availability of such facilities.

Waterbury has a public stadium. If higher education schedules are compatible with its present uses, a stadium may not be required for exclusive use by higher education. Similarly, city parks might be available for outdoor physical education.

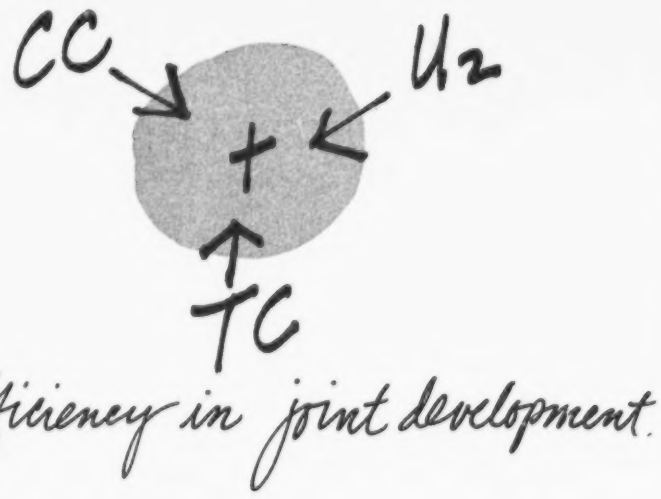
The jointly developed library of the Higher Education Center could rely, in part, on the 168,000 volumes available in the Waterbury Public Library system. In turn the public library would be enriched by the Higher Education Center collection of specific titles.

A number of consortia between higher education and the public schools are being developed across the country and in Connecticut. The University of Hartford and the Hartford Public Schools are proposing an educational park with joint development of programs and sharing of facilities. The possibility of relating the higher education and the public school systems in Waterbury can be investigated as each is involved in major facility developments at the present time. Some areas worth exploration: advanced standing, recognition of curriculum interdependence, public school tutorial work by higher education students.

Coordinated continuing education is a further benefit of the Center to the community. The four cooperating institutions can more comprehensively serve the continuing education needs of the region.

The potential presented by the proposed Higher Education Center imposes demands on higher education and the community to continually investigate all facets of public consortia with higher education to mutually develop common goals.

Facilities



The present institutions are in varying stages of development and have separate rates of growth. As such, it is not reasonable to compare facilities now in use by each of the institutions with projected facilities.

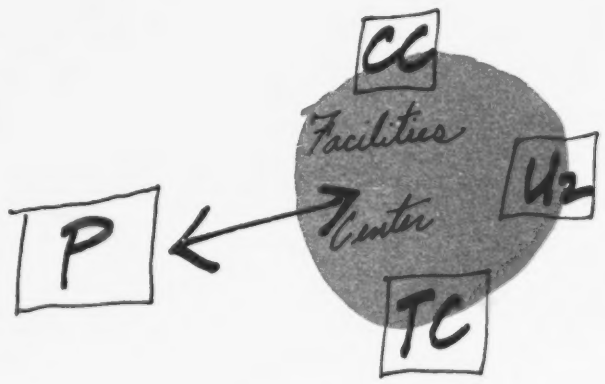
Sharing of facilities will offer increased benefits to the institutions in terms of broader and more comprehensive facilities made available to them. This can be shown through a simulated program of space needs developed for each separate campus and, again, for a Higher Education Center. Assuming reasonable limitations in the degree of allowable separate facilities and constant funding restrictions, the study shows that, for the same or less total area,

a broader range of facilities can be provided through the Higher Education Center. This is particularly true in the areas of supporting facilities. For example, a central library with all of its desirable amenities could be provided for joint use while, if developed separately, finances might well limit the scope of the various functions.

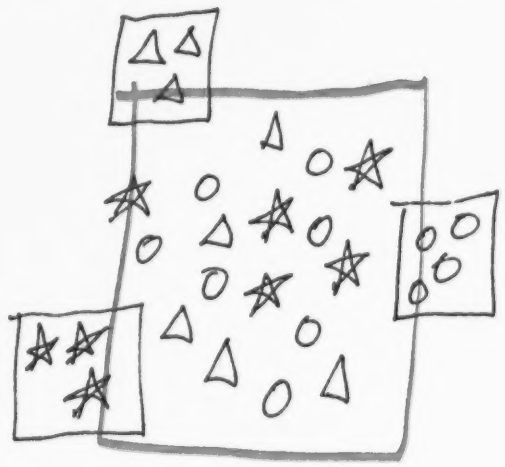
The same benefits apply to other areas. More programs could be offered in a larger central physical education plant than in three smaller, separate units. College union facilities could offer a broader range of potential use to both the colleges and to the community. And academically, the potential for better and more varied instructional aids is increased through joint use of facilities.

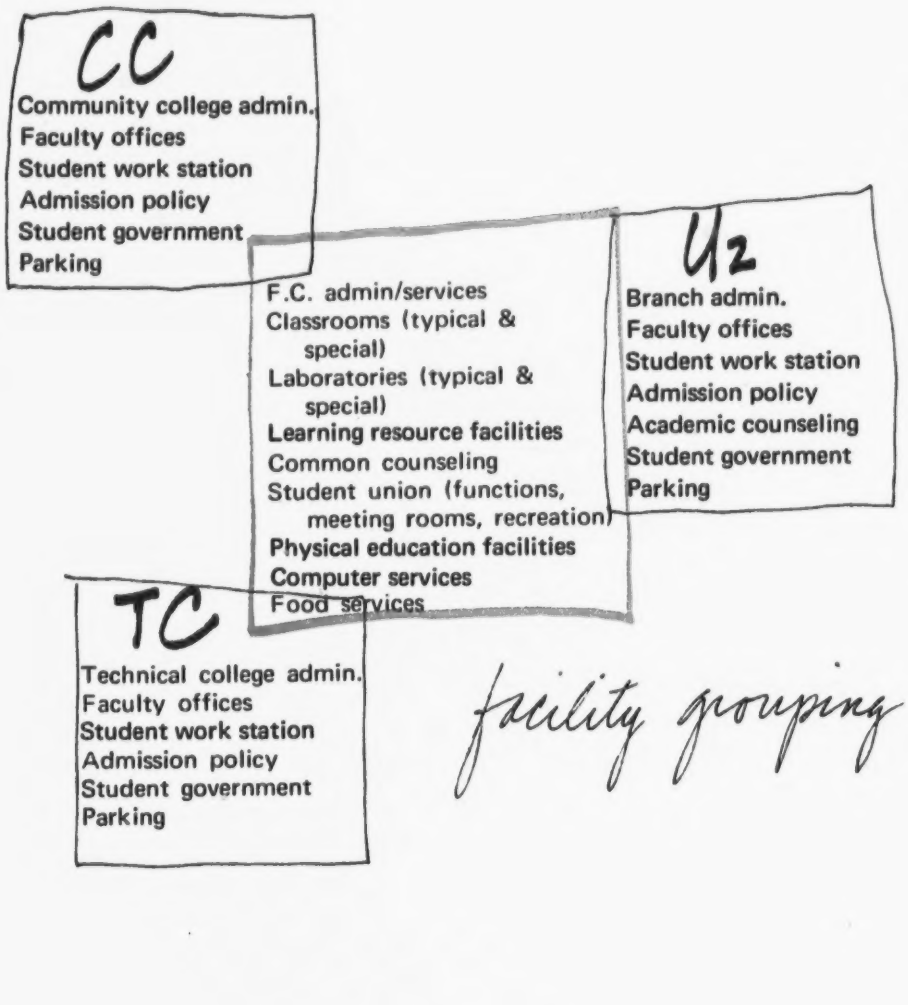
The total facility inventory should be related to the total Education Center needs. For instance, the residence facilities at Post Junior College could provide a limited residence capability to the public institution. Post could make its outdoor athletic facilities available also to the Center. For that matter, Post is a developing institution with anticipated immediate building programs, as are the public institutions. The sharing of facilities with the Center can be mutually developed.

A facilities center can be developed consisting of those facilities required by each institution. The facilities center would be available to all institutions. Likewise, identity elements can be developed for the technical college, university branch, and community college, including only those facilities available to the respective institutions. (The location and independent nature of Post Junior College precludes, at present, its direct participation in the Center.)



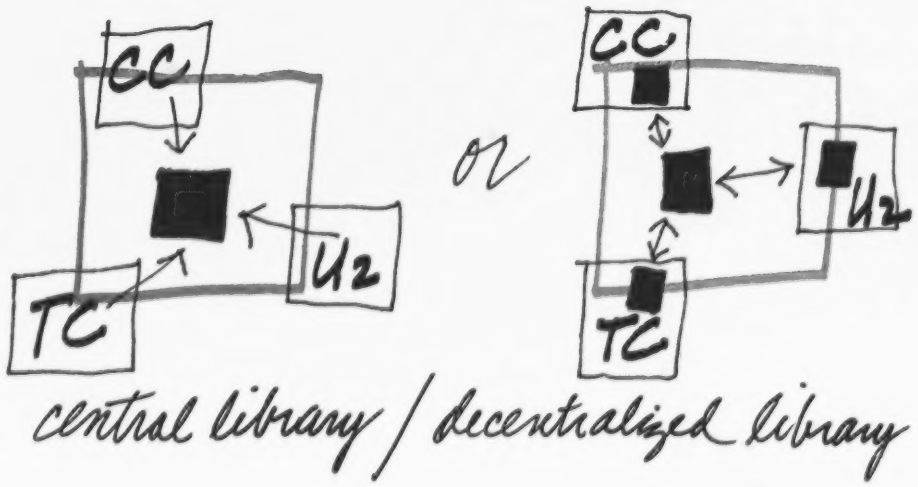
The meaningful mixing of students from separate institutions would occur in the facilities center as all students attend classes and share activities.



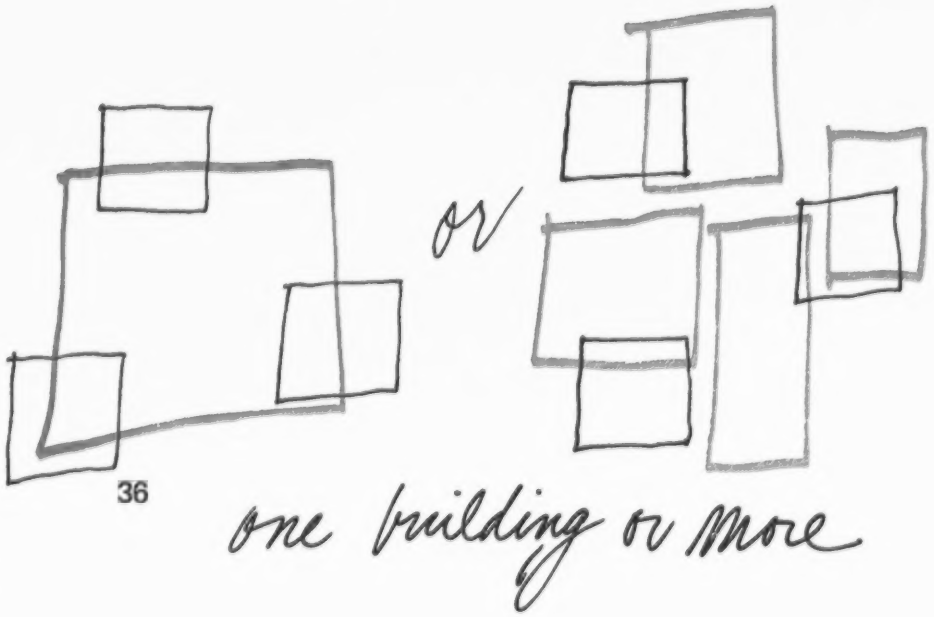


The facility center becomes the major element of the Higher Education Center, containing the educational facility resource for the participating institutions. The identity elements include facilities normally used by the respective institutions and for those activities necessary to faculty and student identity.

Certain functions can be centralized, such as learning resource facilities, faculty administration, food service, facility services, receiving, etc. Jointly developed facilities such as student union, auditorium, physical education, and library can provide each sharing element with more adequate and comprehensive facilities.



Centralizing functional activities does not necessarily mean the creation of a super library, super dining facility, etc. One large library may be appropriate; a centralized learning resource facility with satellite stack areas, containing a specialized collection related to individual institutions, may be just as appropriate. The food serving facility might be related to the identity element, yet maintain centralized food preparation. The functional program to be accommodated will determine the location and physical arrangement of facilities.

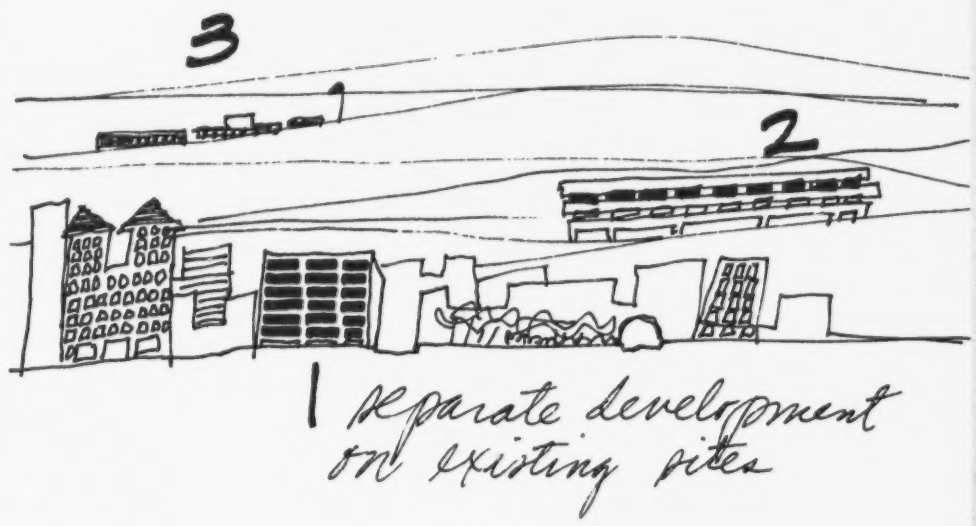


The facilities center is not necessarily one building or even the grouping of all similar group functions in any one building. The number of buildings, their arrangement and character must respond to the academic program developed by the participating institutions.

Facility Development

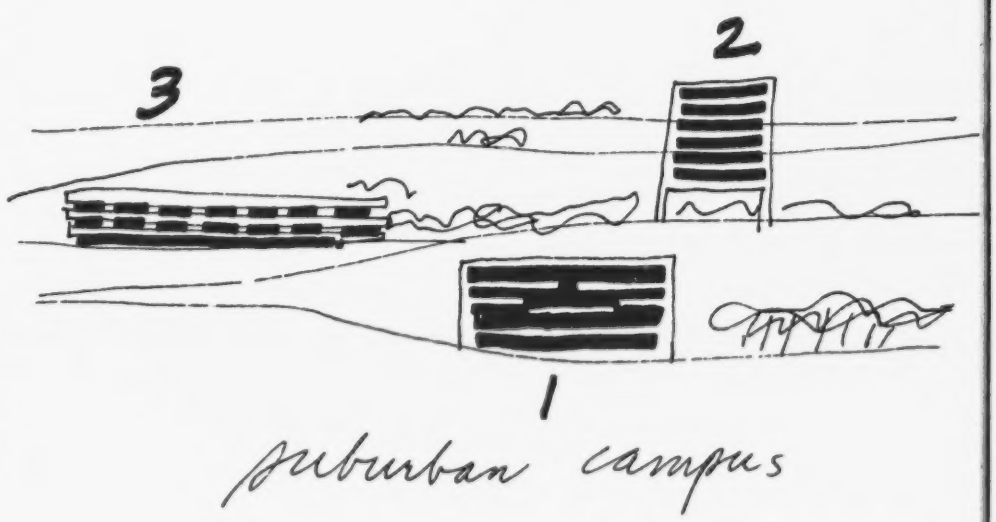
The Advisory Committee investigating possible sites has determined that a suitable site(s) is available for the Higher Education Center. There are as many facility developments possible as there are sites available, each solution being uniquely determined by the conditions presented by the particular site. A discussion of possible solutions is included to identify the basic alternatives apparent at this time. The solutions fall into three general categories as a result of possible sites: the separate campus, the suburban campus, and the center city campus. There are, of course, possible combinations of these three basic alternatives.

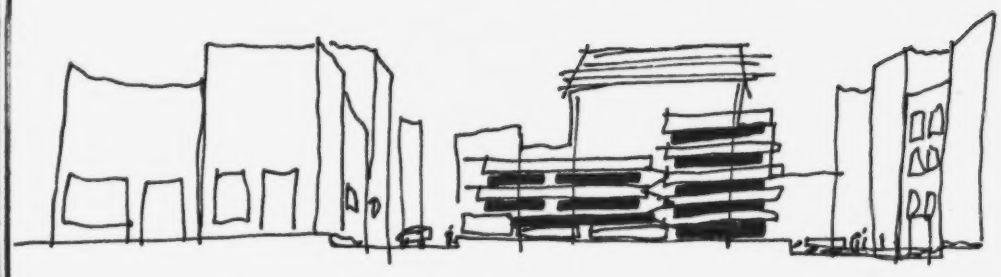
The four institutions presently exist and are developing on separate campuses. (The community college is in temporary facilities.) One alternative is to continue with separate campuses, yet jointly develop facilities, assuming facilities are shared. The present campuses are less than 10 minutes from each other by car; thus, effective sharing can be developed.



Suburban location:

- Larger acreages are possible, allowing a conventional campus development with parking on ground and outdoor physical education on the same site as the Center.
- The three public institutions would be located on the same site and possibly close to Post, and/or possibly related directly to the present technical college campus.
- The center of community activities and facilities would be remote from the campus, limiting the effectiveness of sharing with the Center.
- Access from the region is excellent with a minimum upgrading of access roads from the highway system.
- The minority populations in Waterbury are in the center city and would require transportation.
- The concept of jointly developing shared facilities and the enumerated advantages thereof can be effectively implemented.





Center city campus

A center city development:

- The campus might be limited in acreage because of land availability and cost, indicating possible high-rise buildings and/or structured parking.
- The three institutions would be on the same site, possibly retaining the branch land and facilities for a portion of the facilities resource.
- If extensive outdoor physical education facilities are to be developed, a remote site, out of the center city, would be required because of land area required.
- The Higher Education Center in the center city could relate directly to the central business district, have ready access to the proposed community facilities, be readily available to the minority population, and be an integral part of the center city.
- Availability to the region is excellent. Access from the highway system would require city street upgrading noted in the approved plan for the region.
- The concept of jointly developing shared facilities and the enumerated advantages can be effectively implemented.

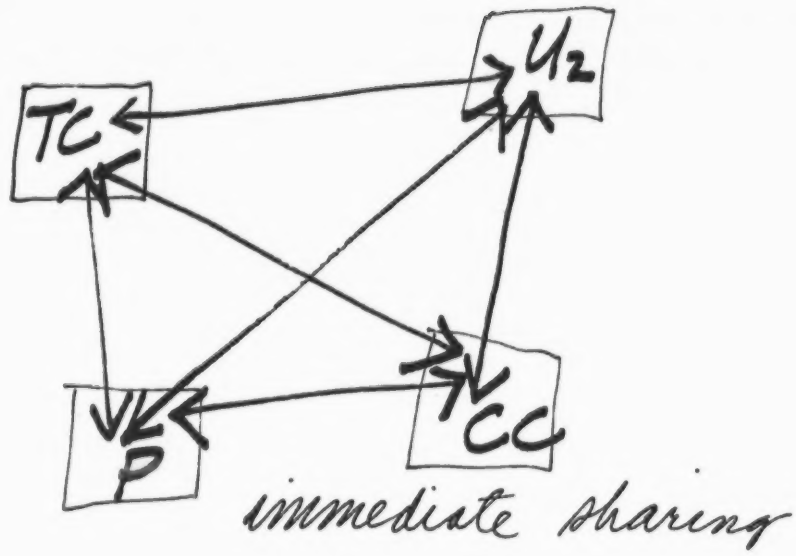
The decision to be in the center city or go to a suburban location depends on the ultimate role of higher education in the region. Higher education can begin to play a new role in the life of the city by becoming an integral part of it, bringing activity with it and functioning as an instrument of social development. The location of the Center should recognize the role of higher education 10 or 20 years hence, not its role today.

Any or all of the three public institutions, because of limited investment currently compared to ultimate growth, can be relocated. Regional social needs – health, education, welfare – are such that uses will be developed for existing facilities if relocation is anticipated. Post Junior College will remain on a site separate from the Center because of its independent status.

Phasing

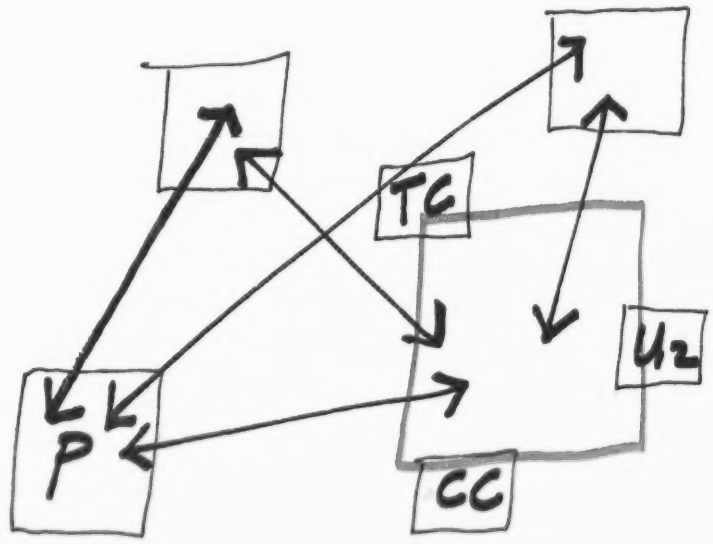
The specific approach to phasing will depend on the site selection and subsequent facility solution.

The potential which exists for sharing facilities among institutions on separate sites can be developed immediately in Waterbury. The participating institutions can realize the limited advantages starting in the fall of 1968, at no cost to the state. The total facility inventory can be considered available to all institutions. The participating institutions can work together to establish the framework of immediate cooperation and the eventual role and scope of each in the Higher Education Center.



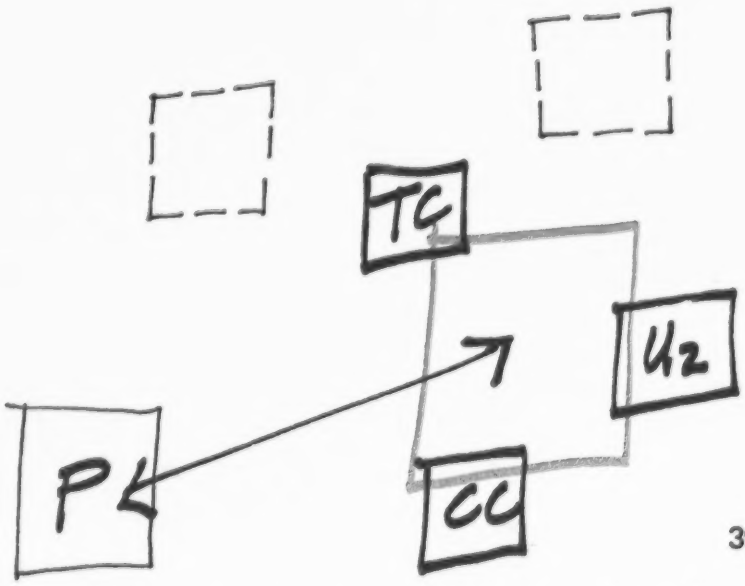
immediate sharing

The first phase of the Higher Education Center should provide in the facilities center the basic facilities for the community college, the increased facility need for the technical college, and university branch, and the centralized functions such as the learning resource facilities, and physical education for the three institutions. The three identity elements should be a part of the initial phase to obtain the ultimate advantages of the Center at an early date. All three public institutions would be based on the same site at the completion of the initial phase; the existing technical college and branch campuses and facilities become remote attendance centers. The initial capital improvement appropriation for the Center should be sufficient to establish the Center and to preclude further investment in existing campuses.

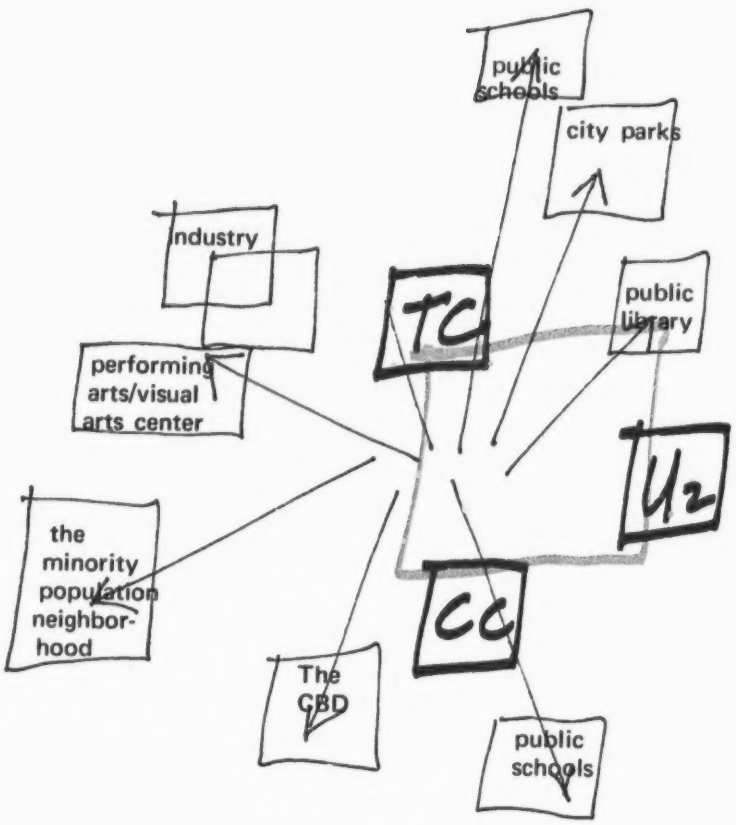


initial capital development

The facilities center would be subsequently developed to eventually phase out the present university branch and technical college campuses (unless the Higher Education Center site can be related to either of these existing campuses).



subsequent capital development



Consideration should be given to satellite attendance centers as one approach to higher education in Waterbury.

Satellite attendance centers, strategically located, would allow higher education to become an integral, essential part of the fabric of the city. The resources of the city can enrich the educational opportunity. The resources and activity of higher education can, in turn, enrich the functions and activities of the city.

Facility Solutions

Specific planning and architectural solutions will be in response to a specific site(s) and to specific academic programs.

The ultimate solution must:

- Be sufficiently flexible to accommodate the changing needs of the community generally, and higher education specifically.
- Arrange facilities to allow autonomous multiple administration and program alternatives responding to the fact of change with time.
- Recognize the possibility of additional institutions being integral with, or participating in, the Center.
- Consider the role of the community in providing necessary services to higher education.

Recommendations-CNVR

Without a site and detailed educational program, recommendations regarding the Higher Education Center can only be a "plan for a plan." As such, the following are presented as precepts from which an eventual plan can be developed:

- The concept of sharing/joint development of facilities among the institutions of higher education in Waterbury is a valid means of effectively meeting the needs of higher education in the region.

- A Higher Education Center including the three public institutions with the facilities center available to all three institutions should be developed to realize the maximum potential of the concept. The Center and Post Junior College can develop the concept of shared facilities to the extent possible with separate sites.
- The participating institutions should immediately organize to develop facilities sharing on their present sites to the extent possible with separate sites and implement specific programs in September 1968.
- The participating institutions should develop the management and administrative concepts paralleling the facility and program concepts. These concepts will include the "safeguards" to preserve the autonomy and diversity of the individual participating institutions.
- The participating institutions of higher education should prepare a jointly developed master academic plan for meeting the needs of the area, projected for a number of years, and setting out the plan for and timing of their respective development. A resulting master facilities program can be developed for the Higher Education Center to accommodate the academic plan and establish the basis for single capital improvement requests to the Legislature.
- The participating institutions should jointly investigate the site(s) most capable of meeting the needs of the Higher Education Center and determine the feasibility of acquisition, all as the basis of a single request to the Legislature.
- Program determination should include continued discussions with officials of the region, Waterbury, and the Public School System to determine the continued and ultimate roles and relationships of each to the other.
- Program determination should include consideration of the other institutions in the area and possible additional institutions as they might relate to the determined needs.
- Planning and architectural responses to the academic plan and facilities program should recognize the uniqueness of the potential inherent in the Waterbury situation.
- Expansion is a major consideration in developing the Center; provide for contingency on student demand beyond projections and for additional component institutions in the Center.

Implementation

The Organizing Body will submit this study, along with its recommendations, to the Commission for Higher Education for consideration and action. The following are recommended steps for implementing the concept of shared facilities in the Higher Education Center, Waterbury, Connecticut:

- This study documents the validity of the shared/jointly developed facilities concept and recommends that the Higher Education Center be developed in Waterbury.
- The Organizing Body, to which this study is submitted will hopefully concur, after due consideration, and favorably recommend the Higher Education Center to the Commission for Higher Education.
- The Commission for Higher Education along with the constituent boards, having considered this study and the recommendations of the Organizing Body, should take immediate steps to indicate their approval and continue their coordination, encouragement, and support of the Higher Education Center.
- The constituent institutions, and their respective boards and faculty in Waterbury should, based on the recommendations of the Organizing Body, immediately establish an organizational structure to develop the potential of sharing facilities, starting in the fall of 1968. This same organizational structure could develop the eventual role and scope of each as a participating institution in the Higher Education Center.
- The Commission for Higher Education should seek funds for preparing (with the full participation of constituent boards and faculty) a proposal in sufficient detail to be presented to the Legislature.
- The Commission for Higher Education, interested in involving all concerned, should hold public hearings for the purpose of discussing the developing Center.
- The Commission for Higher Education should, along with the constituent institutions and boards, consider potential sites for the Higher Education Center and submit a recommendation to the 1969 Legislature for site(s) acquisition.
- The Commission for Higher Education should, along with the constituent institutions and boards, consider a budget request to the 1969 Legislature for funds to implement the initial capital improvement phase of the Higher Education Center.
- The 1969 Legislature should consider an adequate appropriation to implement the Higher Education Center, based on this study, the recommendations of the Organizing Body, the Commission for Higher Education, and the demonstrated cooperative effort on the part of the participating institutions.

Appendix

Acknowledgments

We wish to thank the Commission for Higher Education for the opportunity of participating in this study and the Commission staff for their support and attention in making information available and their participation in the planning/evaluation process.

We are pleased to extend special thanks to Donald H. McGannon, Chairman, Commission for Higher Education; to Dr. Warren G. Hill, Director of the Commission, and Dr. Louis Rabineau, Associate Director, for their continuous counsel; the Commission staff; to Harold Leever, Chairman of the Board, Post Junior College; James P. Friedman, Development Coordinator, City of Waterbury; Anthony Mirto, City Planner, Waterbury; Duncan M. Graham, Planning Director, Central Naugatuck Valley Regional Planning Agency; and Mr. Harlan H. Griswold, President, Waterbury National Bank.

The working committees contributed directly to the development represented in this report in the many meetings since the original proposal. Those committees and membership are noted as follows:

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The Evaluation Conference

Subject: The Potential of Sharing Physical Facilities Among Autonomous Institutions of Higher Education.

Purpose: To bring to Connecticut the experience of consultants qualified in the planning of facilities for Higher Education or with experience in cooperative efforts among institutions of higher education (consortia).

Conference Goals: Review and discussion of the higher education situation in Connecticut, review and discussion of resource consultant experience across the country, answers to basic questions being posed by the concept study, and identification of further areas of investigation, if any.

Approach: Two-day workshop with presentations of the concept development and application for comment and discussion by resource consultants and guests.

Support: Expenses of the conference and consultant fees were financed by Educational Facilities Laboratories, Inc.

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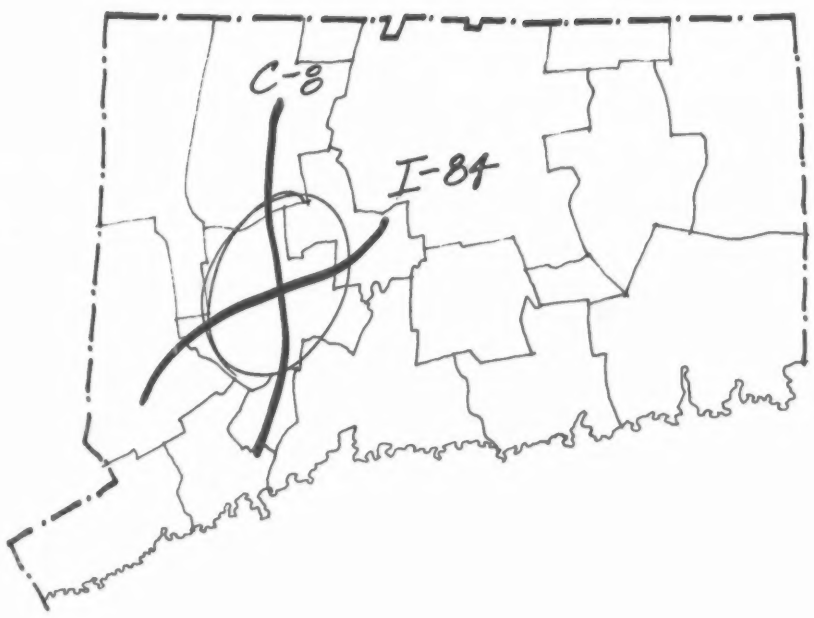
The Central Naugatuck Valley Region



Reference is made to the following studies with information pertinent to this study summarized from each study:

GENERAL PLAN OF REGIONAL DEVELOPMENT, CNVRPA (adopted by the Planning Agency, 10 June 1964).

Region population is projected at 219,000 by 1970; 239,000 by 1980; 295,410 by 1990; and 343,600 by 2000.

The heaviest concentration of people and jobs will be in the center of Waterbury.

Completion of highways Interstate 84 and Connecticut 8 brings the accessibility of the region to the level of most of the state and is, for the most part, adequate to meet the projected traffic growth.

Local arterial street system in downtown Waterbury should be upgraded to satisfactorily handle the forecasted traffic.

CONNECTICUT TAKES STOCK FOR ACTION, CONNECTICUT INTER-REGIONAL PLANNING PROGRAM, Connecticut Development Commission, State of Connecticut, Hartford, Connecticut, June, 1964.

Connecticut is a part of the urbanization pattern in the Northeastern United States "bridging the gap between the rest of New England and New York City."

Connecticut population is projected to grow from 2.5 million in 1960 to 5.2 million in the year 2000.

The CNVR and Waterbury are a part of the higher density pattern of the state which begins along the southwestern coast and extends to, and includes, Hartford, (Fig. 16, Page 27).

Analyzing the City Sizes 1964 (Fig. 34, page 49), a central urban core is suggested, of which Waterbury is an integral part.

The Summary Description of the Proposed Regional Plan (page 75) suggests ". . .the 'strong center concept' is believed to be most advantageous in making the most of the region's natural and man-made assets and in minimizing its potential growth problems."

CULTURAL CENTER STUDY, Waterbury Commission on Culture, 15 July 1966.

Facilities suggested for a Visual Arts Center are:

Display of present historic collection of the Mattatuck Museum.

Gallery space for art and sculpture shows, and related storage facilities.

A small theater for films and other visual media.

A sculpture garden.

Space for the permanent art collection of the Mattatuck Historical Society.

Facilities for instruction in painting, sculpture and other graphic arts.

Facilities suggested for a Performing Arts Center are:

A symphonic hall, capacity 1000 to 2000.

A small theater, capacity of 600 to 800.

An amphitheater for outdoor concerts.

Room for practicing, rehearsing, and instruction in music and drama.

Additional Information

Additional information is obtainable from the following:

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